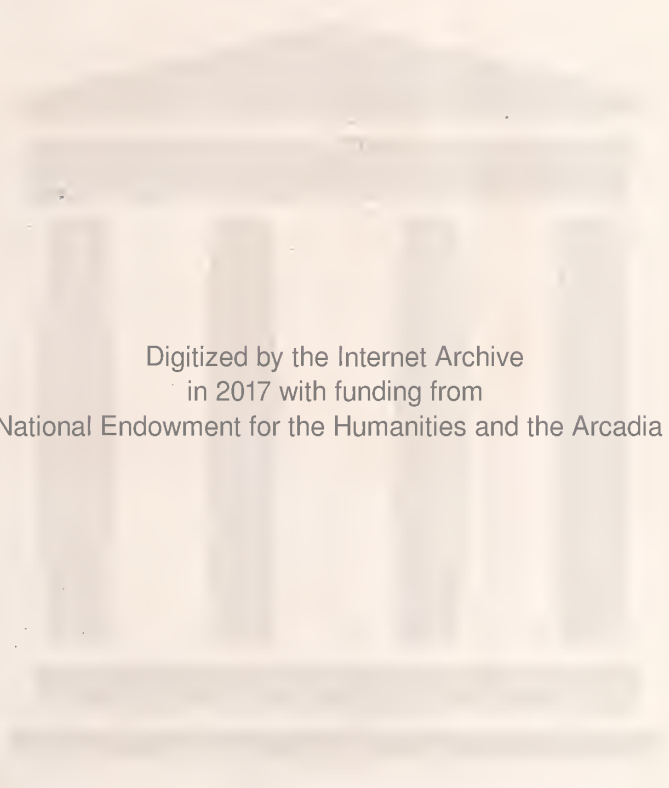




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VIRGINIA

MEDICAL MONTHLY,

(RICHMOND.)

VOLUME III.

From April, 1876, to March, 1877, (inclusive),

*Containing the Transactions of the Seventh Annual Session
of the Medical Society of Virginia.*

Landon B. Edwards, M. D.,

EDITOR AND PROPRIETOR.

1877 :

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RICHMOND.

ADVERTISEMENT.

In commencing this third volume, we promised 912 pages per annum. We have in reality furnished about 1050 pages—including the *Transactions of the Medical Society of Virginia*. Over and beyond any promises at the commencement of the volume, we also presented in our January number an excellent, approved steel-plate engraving of Dr. J. Marion Sims, with an accurately prepared biographical sketch of this great and distinguished author.

For the fourth volume, we can promise only to continue our efforts to improve the journal. Instead of 76 pages, as for Volume III, each number of Volume IV will contain 80 pages. We are promised for our April number an article by Dr. J. Marion Sims on the *Discovery of Anæsthesia*, which will be accompanied by a steel-plate engraving of Horace Wells. We are permitted to announce that at a future day, Dr. Sims will also contribute a biographical sketch of the beloved late Dr. John W. Francis, of New York city. The engraving of Dr. Hunter McGuire is being prepared, and will be duly presented with a biographical sketch of this eminent surgeon, as announced in our January number.

A large number of prominent authors have promised contributions to the fourth volume. Besides the article specially promised by Dr. Sims for the April issue, that number will contain a valuable clinical lecture by Dr. Julian J. Chisolm, Professor of Eye and Ear Diseases in the University of Maryland, etc., of Baltimore, on *A Common Defect in Eye Construction*; a most interesting paper by Dr. L. S. Joynes, of Richmond, Emeritus Professor of Physiology, in the Medical College of Virginia, Secretary of the State Board of Health, etc., on *The First Medical Fee-bill in Virginia; Comparative Compensation of the Medical Profession One Hundred and Forty Years Ago, and at the Present Time*—a paper of interest, not only to Virginians, but to the Profession at large. A report of a *Case of Blepharo-plasty*, illustrated by wood-cut, by Dr. George Reuling, Surgeon to the Eye and Ear Institute, Baltimore; and a number of other original reports, etc.

A large number of subscriptions expire with this March issue. Friends are requested to notify us of their intention to continue their subscriptions by prompt remittances of the subscription price. On the other hand, whoever wishes his subscription to be discontinued is respectfully requested to notify us as promptly of the fact, and thus enable us to keep a clean balance-sheet.

VIRGINIA MEDICAL MONTHLY.

VOLUME III—No. 1.

WHOLE NUMBER 25.

RICHMOND, APRIL, 1876.

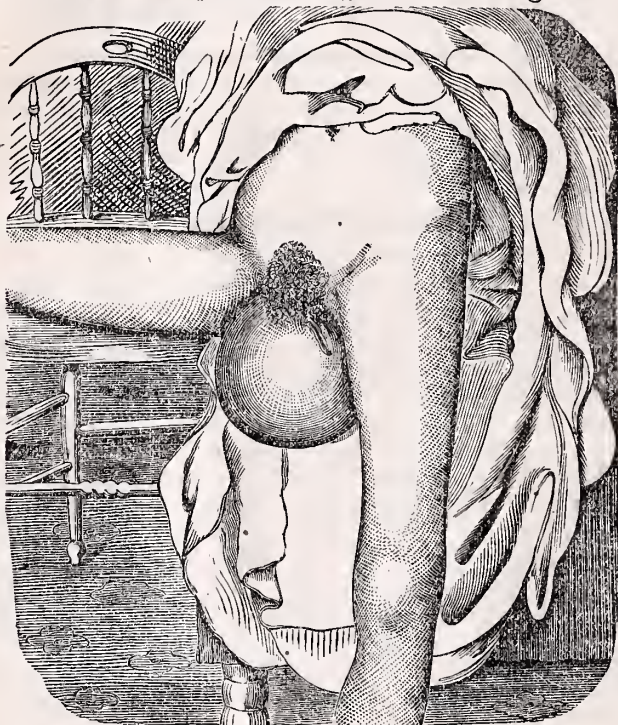
Original Communications.

ART. I.—*Case of Pudendal Hernia, Presenting Unusual Symptoms.* By HUNTER MCGUIRE, M. D., President of Association of Medical Officers of the Confederate States Army and Navy; Professor of Surgery, Medical College of Virginia, etc.; Richmond, Va.

H. A., from an adjoining State, white, single, æt. 38 years, a tall, raw-boned woman with sallow complexion, was received into the College Infirmary January 1, 1876. She states that about 10 years ago she noticed a small tumor about the size of a hickory nut in the right labium of the vulva. When first discovered it was loose, could be readily moved about in different directions, and, she thinks, disappeared when she was lying down. It slowly and gradually increased in size until about two years ago, when it began to grow rapidly, and now has the dimensions represented in the wood-cut (on the next page) taken from a photograph. Its greatest circumference is 22 inches, the measurement being made from the labium down the anterior portion of the tumor to its lowest extremity, and then behind the mass to its junction with the labium again. Its horizontal circumference is $18\frac{1}{2}$ inches. When the woman is standing up the tumor reaches half way to the knee.

It never gave her any serious trouble until three weeks ago, when, in consequence of a long walk and exposure, it became hot, tense, swollen and painful, and then small patches of skin covering the tumor sloughed and left irritable sores. Rest in

the recumbent position soon caused these symptoms to disappear, but the small ulcers were still open when she entered the Infirmary. For the last year she has been obliged to stay in bed one, and sometimes two days in every week to get rid of the pain and tension produced by working in the erect position. Never has had any special derangement of the digestive appa-



ratus; is not liable to colic or constipation; has had usually a good appetite, and eaten whatever she wanted or could get. There are no symptoms of vesical disorder or of uterine disease. Menstruation is regular and normal. Has never received in that region a blow or injury of any kind that she can remember. After standing all day the tumor is very heavy; she has a dragging weight in that part, and feels as if the contents of the abdomen were about to escape into the tumor. Coughing or lifting heavy bodies increases this feeling. The tumor feels soft and elastic, and is attached to the centre and lower part of the right

labium. The upper part of the labium is free from swelling. The mass has a narrow pedicle, not more than $2\frac{1}{2}$ inches in diameter. It has no communication with the external abdominal ring, or with the thyroid foramen. A per vaginam examination shows the soft parts on the right side, between the ischium and the vagina to be much thicker than those on the opposite side; but I could not distinctly trace the tumor into the pelvis. Dr. Moncure, the Hospital Superintendent, and myself repeatedly examined this thick cushion of soft tissues between the ischium and vagina, and we were unable to determine whether it was the neck of a hernial tumor or simple thickening from the dragging and weight upon that side. The vagina was narrow and small, and the uterus high up in the pelvis. Coughing produced no impulse in the lower portion of the mass, and in the upper part the impulse was so slight that the diagnostic value of this symptom was lost.

Uncertain as to the nature of the tumor, I determined to make an incision into it and examine its contents. Chloroform having been given, I very slowly and carefully cut through the wall (fully an inch thick) of the mass, and at once exposed a portion of the large intestine. The bowel was intimately adherent to the inside of the sac; but fearing I might mistake it for a cyst, I dissected it loose for some distance, and carried my finger around it. By carrying my finger into the opening I had made, and through the body of the hernia to the labium, I could trace the protrusion into the pelvis.

The wound, about 4 inches long, was closed with silver sutures; cold water dressings applied; the woman put to bed, and the tumor elevated by a cushion placed under it. No inflammation or trouble of consequence followed the incision, and at this date (six weeks after the operation) the wound has nearly healed, and the tumor—the woman being still in bed and the hernia kept elevated—diminished more than one-half in size.

Minimum Doses on Dispensing Bottles.—An Australian pharmacist indicates on the labels of jars and bottles the maximum pharmacopœial doses, which serve to warn the dispenser, should excessive doses be prescribed.—*Chicago Journal & Examiner*, March, 1876.

ART. II.—*Climatic Influence and Health Resorts.* (An Extract from an Address delivered, by invitation, before the Salt Lake Medical Society, February 14th, 1876.) By B. G. McPHAIL, M. D., U. S. A.

* * * * *

Now, gentlemen, we will consider that portion of our subject of most interest to you—the climate of Utah.

I have selected my subject more with the view of provoking a discussion and eliciting your opinion than with the hope of instructing or informing you on points that your long residence here enables you to know more about than myself. But believing, as I do, that you possess a unique climate, and one admirably adapted to many sufferers from phthisis, asthma, and other affections of the respiratory organs, I desire to direct your attention more particularly to its advantages; and have endeavored to show you, by pointing out the climatic features of other health resorts, the superiority of this region, with the hope of inducing you to make known to the outside suffering world its great merits: remembering—

“That one life saved, especially if young
And pretty, is a thing to recollect;
Far sweeter than the greenest laurels sprung
From the manure of human clay, though deck'd
With all the praises ever said or sung.”

I can find no literature on the subject save the report to the Surgeon-General of our esteemed friend, Surgeon E. P. Volland, of Camp Douglass, and this is published in an army circular,* which seldom meets the eye of civilians. Having been a *disinterested observer* in your midst for five years, his opinion is of special value. He says “the climate is quite similar to that of northwestern Texas and New Mexico, and is agreeable most of the year round, excepting for a month or so in winter. The temperature seldom drops to zero, and only two observations below that point have been taken since the post† was established. The humidity reaches its maximum in the spring months, when the atmosphere is almost saturated. This arises from the winds at this season passing over Great Salt Lake from the northward, bringing the watery vapors not only from that great body of water, but also from the region beyond. Great Salt Lake, with a shore line of nearly 300 miles, is vast enough to furnish an

*Circular No. 8, Surgeon-General's Office.

†Camp Douglass—altitude nearly 5,000 feet.

horizon in places like the ocean itself; and being at an altitude of 4,200 feet, travelers have imagined that on its shores is to be found the most unique and peculiar climate on the face of the globe, combining, as it does, the light pure air of the neighboring snow-capped mountains with that of the briny lake itself; and it is fancied by many that at certain points one may inhale an atmosphere salty and marine like that found on the shores of the Atlantic, combined with a cool, fresh, mountain air like the breath of the Alps themselves. The snow seldom falls to a greater depth than a foot, and soon melts away. The spring begins about the middle of March, and is a splendid season. The atmosphere becomes as clear as a diamond, distances vanish as by enchantment, and Great Salt Lake, 20 miles off, appearing like a broad band of indigo, studded with mountain islands set on its surface like glittering jewels, seems but an hour's ride away.

"The city,* which is a vast orchard dotted with houses half-buried in the foliage, becomes a mass of color, variegated by clumps of the bright blossoms of the peach, pear, apple, plum and apricot mingled with the tender colors of the willow, cottonwood, and mulberry. The bright green surface of the valley follows the snow line as it rises up the mountain sides, leaving a strip of russet color between.

"Regarding the influence of the altitude and climate of Utah on phthisis, it may be set down as *favorable*; and the adult population is as robust as any within the borders of the United States.

"Polygamy, as far as I can learn, furnishes no idocy, insanity, rickets, tubercles, struma, or other cachexia.

"The beneficial influence of this climate on asthma is decided, and deserves prominent mention. It is also the boast of the people, as well as the physicians, that *asthma cannot exist here except under a relieved and modified condition*, which, I think, is the case. I could recount some twenty cases, all remaining well while they stay."

Assistant Surgeon F. W. Elbrey, U. S. A., writing from Beaver (alt. 6,200 ft. and 200 miles south of here), says: "The atmosphere is remarkably dry, the amount of rainfall is very small, and the number of cloudy days in the year very few. Not often

*Altitude 4,300. Annual mean temperature 53°.

does the thermometer rise higher than 90° in summer, or sink to zero in winter. Cool nights are the rule in summer. *Phthisis does not frequently originate here.*" During the past three years, with an average garrison of 200 troops, *not a single death is reported from diseases of the respiratory organs*, while at Camp Douglass only *one death in four years* has occurred from this class of diseases in an average garrison of 340 souls.

Not long hence the Utah Southern railroad extends into Arizona, with a branch to Los Angeles, California, and along these roads can be found a climate* suitable for *any and all cases in which climate can avail*—from seashore to mountain top. The tide of invalids which annually rush on to San Francisco to be disseminated throughout that State will be diverted to this city, and thence distributed to such localities as may best suit their individual cases. Salt Lake City will become the greatest sanitarium in the world. A few hours travel will take the invalid to the dry, cold regions of Montana, or away from the frosts of winter to an almost semi-tropical climate in southern Utah and Arizona, while your cañons and mountains and lakeshore offer delightful retreats from the dust and heat of midsummer.

Not a few will find this valley affords them the desired relief. What a wonderful combination of attractions are centered here! Raise your eyes to the snowy summit of yon pile of mountains, shining like a white summer cloud in the blue sky—the source of your cooling breezes and abundant verdure, of your gushing fountains and perennial streams. It is this glorious range of mountains which gives to Utah that combination of delights so rare in this latitude, shielding you from the wintry blasts, and affording the fresh vegetation and temperate airs of a northern climate, with the vivifying ardor of a tropical sun, and the cloudless azure of a southern sky. It is this aerial treasury of snow which, melting in proportion to the increase of the summer heat, sends down rivulets and streams through every glen and gorge, diffusing emerald verdure and fertility throughout a chain of happy and sequestered valleys.

Consider the great merits of your Warm and Hot Sulphur Springs—only a mile distant—rivalling in virtues the famous thermal springs of Arkansas.

*See article on *Climate of Arizona*, in *Medical Monthly* for November, 1874, by Dr. B. G. McPhail, U. S. A.

Look at your grand Lake, with its islands towering almost to perpetual snow line, and its beautiful scenery unlike any other on the Continent; your wild and secluded cañons and picturesque valleys, inviting the invalid to varied fields of pleasure, offering excellent opportunities for driving, boating, swimming, fishing, hunting, &c., thus interesting the mind while the body drinks in a new lease of life and happiness.

* * * * *

ART. III.—*Case of Adherent Placenta with Hour-Glass Contraction of the Uterus.* By F. B. WATKINS, M. D., Richmond, Va. (Read before the Richmond Academy of Medicine, March 2, 1876.)

A lady was brought at full term to her second accouchment. Her health had been excellent during the whole period of pregnancy. Nothing unusual occurred at the delivery of the child. The only remarkable incidents were the feebleness of the cry of a child so healthy and well developed, the abnormally small and pallid umbilical cord, and the unusual vigor and persistence of its pulsations. Even under the administration of ergot there was so little abatement of the activity of the pulsation for so long a period, that I did not hesitate to divide the cord. The child then breathed with full force and cried with increased vigor. The cord had one peculiarity, viz., about 10 or 12 inches from the umbilicus it divided, sending off a considerable loop of one of the arteries to the extent of 2 or 3 inches before it re-united to complete the cord. These peculiarities have only an interest in regard to the sequel. The uterus, under control of good ergot, failed for over an hour to start the placenta. Running my finger along the cord up through the os internum, about midway of the cavity of the uterus, I encountered a marked hour-glass contraction, utterly unyielding and resistant. The patient was completely chloroformed. By incessant pressure of the fingers arranged conically, this contraction yielded so far as to enable my hand to discover a completely adherent placenta occupying the left angle of the cavity. Here permit me to remark, what all who have encountered similar difficulties will appreciate, that the sac lying loosely in folds, suspended in the cavity, will easily embarrass one unless he is *en qui vive*. This embarrassment being

anticipated, I turned the pendant sac aside, and, to my dismay, found the edge of the placenta so very thin that I at once abandoned all effort to dislocate it by the edges. Nothing remained to be done but to plunge the finger into the central portion of the placenta and dissect it outwards towards its periphery. This was done—remembering the two horns of my dilemma, viz., not by rude handling to injure the uterine tissue, nor to leave any portion of the placenta behind. I think I may say I steered safely between both dangers, as the good getting up of my patient demonstrated. It is enough to say that every portion of the placenta was removed, since there was no fetor nor departure from healthy lochia.

In two hours after the placental delivery there was marked febrile exacerbation of sharp activity, some tympanites, and universal abdominal tenderness. The bladder required the catheter for several days. Anxiously I awaited the apprehended fetor; diligently I watched the peritoneal or metritic invasion. But a kind Providence superintended the storm, and by the use of poultices, veratrum viride, quinine, spirits of nitre, and disinfecting vaginal lavements, the lady was teased over the anxious five days, and reached her twelfth day safely moored and on her feet. Under this treatment there was no break in any of the phenomena of lochia or lacteal secretion.

I will avail myself of this opportunity to say that, under the force of the quinine to reduce the temperature, and veratrum viride to control the heart's action, had I had any doubts before, they would have flitted away before their beautiful action in this case.

It would be a rude imposition upon the patience of this Academy to essay a long, tedious rehash of the controverted points of hour-glass contraction or adherent placenta. Suffice it to say, that in point of practical use any and all theories may be safely adopted. Whether the contraction occur at the os internum, or at about one-third or midway of the body, the practical point is that if it cannot be made to yield by simple means, time, ergot, &c., the accoucheur is shut up to the necessity of manual or mechanical interference. In scarcely any surgical procedure does chloroform more beautifully and magnificently illustrate its almost

supernatural magical value than in the conduct of a case of hour-glass contraction.

In those cases in which the detached placenta is encysted or incarcerated above the seat of contraction, chloroform is admirable in its utility; but when superadded to the contraction there is an adherent placenta which must be cautiously and tediously dissected off, the chloroform is invaluable. I bear this cheerful testimony. Fortunately for the woman, both of these conditions of dystochia are extremely rare, and few of us in civil practice will ever have experience enough to value ourselves as experts when we may have the misfortune to encounter them.

As this experience is so recent and fresh in my memory, I will be pardoned if I say that the first terror at the discovery may be allayed if there be no hæmorrhage, and that patience and time will become valuable factors in the conduct of such a case. But if there be hæmorrhage, in spite of ergot, no time is to be allowed before we must proceed to deliver the placenta. How long may we safely wait? I answer, one or two hours. But may we not safely wait many hours? Yes, if we can prognose with actual certainty what will take place in that time, and if we can afford to remain at the bedside of the patient. But it is hardly probable, if the powerful contractions of the circular and longitudinal fibres in the fierce throes of expulsion do not detach the adherent placenta, that any help can be obtained by waiting for time and patience beyond one hour. The rule of guidance then seems to be this: if in one or two hours there be no evidence of detachment, it is obvious none will likely occur normally. Hence will appear the propriety of proceeding at once to deliver the placenta.

Per contra, if there be no hæmorrhage, and the placenta not delivered, the obvious indication is as speedily as possible to complete the detachment and deliver.

Again, if the placenta be encysted or incarcerated above the point of contraction, and the ordinary means of overcoming the contraction fail, then there is left to us nothing but to dilate the seat of contraction, under the control of chloroform, and deliver the placenta as early as possible.

ART. IV.—*Paralysis Agitans Successfully Treated by Electricity, Strychnia, Blisters and Rest.* By J. J. CALDWELL, M. D., Baltimore, Md.

Wm. Moon, aged 65, came to my office September 3d, 1874, suffering terribly from shaking palsy—that of the superior extremities being of long standing—which, as remarked by his physician, Dr. George T. Collins, who recommended the patient to me, “completely incapacitated him from working at his trade,” which was that of a shoemaker. He had almost entirely lost the use of his hands from want of power in them, so that it was with difficulty that he could raise his food to his mouth.

His trouble was characterized by involuntary tremulous agitations of the muscles of the hands, arms and head, and was gradually extending over the upper half of the body. Muscular power had greatly diminished; there was a propensity to bend the trunk forward, but the senses and intellect were uninjured. The disease had progressed slowly to such a serious stage as to prevent sleep, to a certain degree, and interfere with deglutition and mastication. A diet of oat meal and milk was ordered, and the following given:

R. Strychniæ sulph.....gr. j.
Acid phosphor., dil..... $\frac{3}{4}$ j. M.

To be taken as follows: Ten drops in a wine glass of water before each meal, and at bed time. This dose was increased a drop each day, until 25 or 30 drops were administered each time, or, indeed, until the patient had arrived at that point where the physiological phenomena of strychnine were manifested plainly, viz.: slight tetanic or clonic spasms in the back and legs. At this juncture this treatment was interrupted by rest and gentle aperients for a few days, when it was renewed.

To the nape of the neck blisters were ordered, and subsequently dressed with belladonna plasters once a week during the time of treatment. Galvanic currents were passed through the medulla and the sympathetic to the hands for 15 minutes every other day; strength of the current, 12 cells Stöhrer battery; while on the alternate days, gentle faradism was applied to the groups of faulty, weak and trembling muscles.

This treatment was continued from September 3d to Decem-

ber 22d, with varying interruptions; during the months of September and October almost daily; while in November and December it was repeated only twice a week.

From the commencement of the treatment, the patient's general health and palsy symptoms improved collaterally with each other until about Christmas, when he was dismissed, restored to health and power, and able to resume his occupation with a steady hand.

His physician, Dr. Collins, in a communication to the writer, September 24th, 1874, says: "I look upon the great improvement you have effected by your treatment as simply wonderful;" and he refers to the fact in another letter of December 16th, that "the patient had been under the treatment of some of the leading physicians of Baltimore, but without any improvement in his case."

This is not so surprising, inasmuch as Trousseau speaks of paralysis agitans as an absolutely incurable disease; and Althaus says: "This is even now true of cases of long standing." He says, however, if the affection be confined to one limb, and the case be recent, anelectrotonus of the medulla and spinal cord is occasionally of service.

"Dr. Russell Reynolds has cured a case of paralysis agitans of the right arm, which had come on suddenly in a man aged 57, who had, for two years before, suffered from occasional tremor of the right arm and leg. He used the current of 120 links of Pulvermacher's chain battery to the arm for half an hour or an hour each time. There was improvement after the first application, and after five the involuntary jactitation completely ceased. The facts that the palsy had lasted only a fortnight, and was confined to one limb, would naturally make the case a most favorable one for galvanic treatment."

Beard and Rockwell speak of two kinds of shaking palsy—one with organic lesions, and one where no lesion can be discovered—the latter being styled "functional." "The disease may be local or general; it may attack one limb, or the lower jaw, or all four extremities. It is most frequent in the aged, but it is sometimes observed in middle life, or in the young." These latter authors speak of the benefit to be derived from central galvanization and general faradization in paralysis agitans, the

best results having been obtained by galvanization of the spine and sympathetic and brain.

As to the *prognosis*, they say that; where all the limbs are affected, cure is never accomplished by any treatment. "Cases in which only one limb, or one upper and one lower limb, are affected, are sometimes benefited, and, in rare instances cured." "The tremor of the limb is sometimes abated or completely arrested for one or more hours after the application *either of general faradization or galvanism of the spine*, and, in rare cases, entire recovery occurs."

Causes.—Though in many cases the causes of paralysis agitans are obscure, yet these mainly depend upon the emotional disturbances from continuous or severe muscular exertion, or from those diseases which prostrate the nervous system. Hammond says that of 21 cases, of which he has records, 6 were apparently due to mental causes, 4 to excessive mental exertion, 4 to diseases of various kinds, 2 to injuries, and in 5 no cause could be discovered.

Pathology.—Autopsy, even in the severest cases, has revealed no pathological lesions. Hammond regards the disease as due to "an irregular and diminished evolution of nerve-force from the motor nerve-cells in relation with the nerves supplying the muscles in which the agitation exists." That agitation "is not probably due to any cause inherent in the muscle, but is the result of exhaustion in the nerve-cells, and the disengagement of insufficient force in an intermittent manner; to some such action in the motor-nerve cells, in the gray matter of the spinal cord," Hammond supposes paralysis agitans to be due.

In conclusion I would state that the patient whose record I herewith report, has appeared at my office within the last few days, and he exhibits such a healthy physique as to indicate no return of his old ailment.

ART. V.—*Treatment of Gonorrhœa.* By WM. K. GATEWOOD, M. D., Jamaica, Va.

Living on the Rappahannock, where there are a great many oystermen who lead dissipated and reckless lives, I have had a good many cases of gonorrhœa to treat. For the past two years

I have discarded all the various modes mentioned in the books and journals, and have adopted one of my own, which I have found more satisfactory in its results than any other.

I order the patient to take a saline cathartic every morning to keep his bowels in a good lax condition. I prepare for him a bottle of bicarbonate of potash, and arrange the dose so that he takes ʒj every day. I then prepare him an injection of twelve ounces of thin gum acacia mucilage and add to it ʒij of carbolic acid. Sometimes I weaken the injection when the inflammation is high. I always enjoin rest and a light diet, and positively prohibit all stimulating drinks,—which advice is rarely ever followed. I always instruct my patient first to urinate, and then to wash the urethra out with tepid water before using the injection; to do this night and morning. If the case seems one of very high state of inflammation, and I can confine my patient to bed, I add tartarized antimony to the potash and use water dressings to the member. Since adopting this plan I never have any dyspeptic symptoms which follow so often the use of balsam, yellow sandal, &c., and my patients get well much sooner and at a much less cost to me, for in the country we have to furnish all the medicines, and frequently without pay.

This plan of treatment is very economical, and I think country doctors generally will like it if they will give it a fair trial. I treated ten cases during last January, and all were cured perfectly in from 8 to 15 days, and on their feet all the time.

ART. VI.—*Phytolacca Decandra in Arresting Threatened Mammary Abscess.* By W. H. MACON, M. D., Old Church, Va.

I have used *phytolacca decandra* four or five times, with what seemed to me very decided and happy results, in arresting the formation of mammary abscesses. The last case was that of a lady who, in her previous confinement, had suffered with a rising breast, and in this, her second confinement, greatly feared a repetition of her trouble. I had directed the husband to provide himself with the tincture, which he failed to do. The lump, or hardness, having made its appearance in the breast, and there being every reason to apprehend the dreaded result, and not having the tincture, I directed a tea to be made of the poke-root,

of which the patient was to take a cup full three or four times a day. The next day, when I called, the lady informed me that she had taken the tea, but was "never so sick in all her life." The nausea, retching and vomiting were excessive and long continued. I asked to see the vessel containing the tea, and I found she had made almost a saturated solution. But the breast was almost entirely relieved. I have never experienced any such bad effects from the tincture, administered in doses of twenty drops four times a day, but, as before stated, have been much pleased with its action.

Clinical Reports.

A Case of [Hysterico] Epilepsy only during Pregnancy. WM. K. GATEWOOD, Jamaica, Va.

There lives within one mile of me a negro woman, now about 45 years old, the mother of 12 children. I have known her all my life, and been her physician since 1858. When she is about a month advanced in pregnancy, she begins to have epileptic fits, which generally last about ten days at a time. Then they cease for about twenty days, and commence again and last ten or twelve days longer, and so on during the whole period of gestation. During the fits, she has to be constantly watched to prevent falling off the bed, biting her tongue, &c. She rarely takes any food during the ten or twelve days of attacks. I have tried every remedy with her that I ever heard of, and found nothing to do much good. Bromide of potassium and assafoetida, commenced a day or two before the attack comes on, and continued through it, have afforded much relief. This woman is remarkably young looking, and as active as a girl, and is never sick, except in this way, during her pregnancy.

Original Translations.

From Le Progres Médical. By WM. S. STOAKLEY, M. D., Bay View, Va.

Oil of Sandal in the Treatment of Blennorrhagia—Its Best Mode of Administration.—Sandal wood has been known for a

long time in botany. Its therapeutic properties have not been studied, however, except in a superficial, way till very recently. Dr. Th. B. Henderson devoted a special work to it. Shortly afterwards, M. Panas, Surgeon to Hospitals of Paris, having observed the effects of sandal wood oil in blennorrhagia, communicated to the Société de Chirurgie the results of his experience with the agent. Up to this time not a single complete memoir on sandal had been published in France, when Dr. G. Durand, aware of its utility, selected for his inaugural essay the study of the therapeutic properties of the oil of sandal (Paris, 1874).

Omitting what is as yet undecided, the oil of sandal ought to be applicable in certain fevers, pulmonary catarrhal affections, etc. We will, however, examine more particularly the use of this substance in the treatment of blennorrhagia and analagous affections. In these affections, the balsamic properties of the oil of sandal have the same effect as copaiba and cubebs.

A Hollander, Rumphius, discovered (1750) the anti-blennorrhagic properties of the oil of sandal. More than a century had passed before new researches were made. Guided by a passage in a work of Dr. Saughnessy, in which he had said, "the original inhabitants of different countries treated themselves with the powder of sandal for blennorrhagia," Dr. Henderson experimented with sandal, and published the results in the *Medical Times and Gazette* (June 3, 1865). On seeing this publication, M. Panas gave the oil of sandal to the men in his service who suffered with blennorrhagia. His experience confirms all the points noticed by the English physician.* Several physicians—amongst others, Dr. Simonnet, Physician to Hôpital de Midi, and Dr. Caudmont, in his private practice—had recourse to the oil of sandal with decided benefit (G. Durand, *loc. cit.*); but their isolated essays were little known. Prof. Gubler also largely contributed in calling attention to sandal in the following lines taken from his *Commentaries Therapeutiques sur le Codex*, 1873: "The oil of sandal passes into the urine like turpentine and copaiba. It, like these, also acts upon the mucous surfaces of the genital and urinary organs, and will replace them in the treatment of vesical catarrh and in blennorrhagia. It has for several years been

**Bulletin de la Société de Chirurgie*, Sept. 1865. Consult an article of M. Guest de Serviere in *Gazette Hebdom.*, July 4, 1865.

used in this manner (Henderson, Berkeley, Hill, Panas, etc.). I have also often verified its utility. They administered the oil of sandal in capsules given in the same number as copaiba." As this citation plainly indicates, the eminent Professor of Medicine of Paris classes oil of sandal with the most active balsams, copaiba, cubebs, etc. In our daily observations made with these different medicines we learn that oil of sandal renders real service in the treatment of blennorrhagia, blennorrhœa of the neck of the bladder, contractions of the urethra with partial inflammation of the mucous membrane (Caudmont cited by Durand). Regarding the resemblance noticed in the therapeutic effects of the oil of sandal on the one part, and copaiba and cubebs on the other, much depends on the mode of administration. Every one knows that gluten capsules—those of Mathey-Caylus, for example—have been recommended for a long time in many classic works, and have rendered acceptable the use of the balsams in persons in whom the stomach is very susceptible. It is but natural and proper, then, to give the oil of sandal in gluten capsules. The capsules of Mathey-Caylus, in which the envelope is as small and as thin as possible, rapidly dissolve in the liquids of the the stomach, and consequently constitute the most convenient preparation. The odor of the oil of sandal is absolutely masked, as are those of copaiba, cubebs, turpentine, tar, etc. Thanks to this pharmaceutical ingenuity, the physician can now prescribe capsules containing various balsamic medicines of which the employment is necessitated in the treatment of genito-urinary affections. In short, to justify this appreciation, it is proper to recall the opinion of the most illustrious syphillographer of our day, Ricord: "The best way," says he, "of all we can imagine to envelope the the copaiba is to place it in gluten capsules. This procedure, superior to all others, combines the conditions desired to render the employment of copaiba easy and convenient" (*Gazette des Hôpitaux*, Dec. 7, 1875.)

Salicylic Acid, formerly obtained from the essence of gaultheria, or from spiræa ulmaria, and from salicine, is perhaps now more economically derived from the phenate of soda treated with a heated current of carbonic acid. Kolbe, who discovered this mode of preparation, and Thiersch knew the remarkable antiseptic power of this substance, which is in this regard entirely com-

parable to phenic acid, and does not possess irritating and corrosive properties. Buss, of Bâle, has more recently demonstrated, by a series of experiments, that salicylic acid is a powerful antipyretic, and rivals sulphate of quinia. The doses ought to be double those of the quinia (4 to 8 grammes); the antipyretic effect is then certain, and no danger is to be apprehended. This is true in cases of fever; but in health moderate doses (2 grammes or more) suffice to cause deafness, troubles of vision, uncertainty of gait, sometimes delirium, without producing any effect upon the pulse or temperature. The antipyretic action is never accompanied with narcotic effects, but there is abundant diaphoresis, without chilliness. Troubles of digestion and vomiting are exceptional results of the use of salicylic acid. The lowering of the temperature is considerable after notable doses taken at one time, as in the evening, more than is caused by the cumulative action of two doses taken—the one in the evening, the other on the following morning. Elimination by the urine commences a short time after its ingestion, as is easily shown by a solution of the perchloride of iron, which gives, with the salicylic acid, a deep violet color. In *résumé* by Buss, therapeutics possesses in this new agent one that is certain in its action and not more dangerous than the sulphate of quinia, and at a price much less.

The use of salicylic acid combined with cold baths will give the best results (*Deutsch Arch. f. Klin. Med.*, XV., p. 45). In the same journal (p. 403) is a short article by Wolffberg, who observed the greenish color of the urine of those who had taken salicylic acid; the quantity of indigo contained in the urine is then relatively considerable. Letzerich (*Arch. de Virchow*, LXV. p. 102) sees in salicylic acid the means of preventing the infection of diphtheria. He inoculated rabbits with the *diphtheric organismen*, which caused death in those animals left without treatment. In the other cases the internal use of salicylic acid arrested the infection, and the micrococci which had already been observed in the blood disappeared. These experiments are not without interest, as showing the influence of the agent in the evolution of septicæmia. The conclusions relating to the application of salicylic acid in diphtheria should be more reserved. In the meanwhile it remains to demonstrate the specificity of the organisms studied by Letzerich. This question is far from being

decided, and very recently has been studied in France in two memoirs (by Homolle and Duchamp), in which the conclusions differ notably from the generally accepted opinions in Germany.

At what Moment Should the Cord be tied after the Accouchment?—At the suggestion of M. Tarnier, M. Budin undertook researches on this subject at the Hôpital de la Maternité. He divided his experiments [75 in all] into two series: In the first, the cord was cut, as is the custom, more or less immediately after the expulsion of the foetus; in the second series, the ligation and section were not practised until several moments afterwards. When the cord is cut immediately or soon after the first inspiration, it contains about 100 cubic centimetres of blood; as may be expected after delaying the ligation and section, the cord, at first turgid, gradually empties itself, and its pulsations cease; if then it is cut, it is found to contain not more than about 12 cubic centimetres of blood. What becomes of the 88 cubic centimetres of blood which thus disappear from the cord? According to M. Budin, it is inspired by the foetus, and consequently goes into the circulation. Immediate section of the cord thus deprives the infant of 90 grammes of blood, which, proportionately to its total weight, is equivalent to a loss of 1700 grammes in an adult. It is easy to explain this aspiration by the foetus of the blood contained in the cord. The establishment of respiration causes the chest to act, as well upon the vessels of the cord as upon those of the individual. The pulmonary capillaries, empty an instant before, fill themselves for the first time, and thus offer a vast receptacle for the blood contained in the cord, which is intended for the nourishment of the new born. It is true that at first the umbilical circulation continues for awhile. But a sort of equilibrium is soon established between the blood received and the blood sent back. Finally, the umbilical circulation is arrested, the pulmonary aspiration continues to exercise its influence with increasing intensity, so that at length it brings to account the liquid contained in the cord. It is not to be doubted that this species of transfusion ought to be useful to the foetus; on the other hand, can it be detrimental to the mother? *A priori*, this question seems to be resolved in the negative. It is known that, in effect, the placental blood is eliminated with the placenta, and that it should

not return into the maternal vessels. It is said, it is true, that the turgescence of the placenta is not an unfavorable condition for its delivery, but that it should render its delivery easier. This objection is only hypothetical, and is not in accordance with the numerous contradictory observations made by M. Budin: the least voluminous placentæ are always those which are easiest delivered; and M. Tarnier has always found this to be the case.

The practical interest of this communication is too evident for it to be further indicated in this brief discussion of the subject, which has for its sole object to determine whether really the blood of the cord passes into the circulation of the new born, or if, on the contrary, it does not remain in the placental vessels. According to M. Parrot, so long as the umbilical vessels are permeable, the blood aspirated by the arteries is sent back by the vein, without benefit to the infant, and the fact of the predominance of the thoracic aspiration is not sufficiently demonstrated. For this demonstration to be complete, it would be necessary to weigh the fœtus, not yet delivered, at the moment of its expulsion, and also after the ligation of the cord. This comparative experiment is, unfortunately, but little practicable; for these weights ought to be very accurate. However, it would suffice to repeat it but a few times to settle definitely the question. M. Budin is content, in answering this objection, that he has made on this subject positive experiments, of which the details will be given in a memoir in the course of publication.—*La Tribune Médicale*, January 30, 1876.

From the French and German, By WM. C. DABNEY, M. D.,
Charlottesville, Va.

Intestinal Obstruction by a Large Biliary Calculus.—Drs. Martin and Bernardel report (*Le Progrès Médical*, January 8th, 1876,) the following case: Madame L., aged 78 years, was taken on September 14th, 1875, with obstinate constipation, which was accompanied in a few days by bilious vomiting. Dr. Martin was called on September 16th, and prescribed an active purgative. On the 17th, the vomiting persisted, and the matter discharged had a fœcal odor. There was some febrile action.

Two pills of croton oil, containing a half drop each, and a purgative injection were prescribed. On the 18th, her pulse was 120, eyes sunken, skin of the extremities cold, and she had frequent hiccough. Air was injected into the bowels, but without success. There was but little pain on pressure, except in the right iliac fossa, where there was considerable tenderness. The rectal touch showed that the rectum was empty. Dr. Martin administered four large syringes full of fluid with considerable force without provoking an evacuation. On the 19th, there was in the right iliac fossa a considerable puffiness, of cylindrical form, which caused Dr. M. to think that the obstacle lay in the cœcum. A purgative of jalap and calomel was administered, and Dr. Martin practised prolonged rubbing on the abdomen. He also ordered injection of fluid in which had been boiled four large onions. These injections caused an intense hæmorrhoidal congestion. Suddenly, about 5 o'clock on the morning of September 20th, the patient expressed a desire to go to stool, when a large, hard body dropped into the night vase, which proved to be a calculus, composed for the most part of cholesterine. In a few days the recovery was complete.

On inquiring into the history of this case, it was ascertained that about 18 months ago there had been some symptoms of intestinal obstruction, such as constipation and vomiting. She had also been subject to attacks of violent colic without jaundice. The large calculus (for there were six other small ones) was composed of cholesterine. Eight hours after its expulsion it weighed 18 grammes. It measured 43 millimetres in length, and in circumference 9 centimetres.

MM. Hand and Bernardel thought it probable that this calculus had gained access to the intestine from the *bladder* by a process of ulceration.

The Connection Between Injuries and Inflammation of the Joints.—In 1871, M. Verneuil detailed to the Académie de Médecine his researches and his individual views on the relation which exist between traumatism and alcoholism. The present article is, he says, a sort of second part to that paper. These two questions of general pathology, and all those of a similar nature, such as traumatism and syphilis, scrofula and traumatism, &c., have not been and cannot be answered yet, because no

practical conclusions can be reached or theories formed till a number of careful, accurate and conclusive observations have been made. But if it is not possible to reach at present these general conclusions, there is nothing to prevent us from making a separate analysis of the materials already collected. With the exception of a few French and foreign *savants*, among whom may be named M. Charcot and Sir James Paget, but few physicians have paid any attention to the relationship which exists between local accidents and general diseases. It offers an inexhaustible mine for explorations. The subject is, however, not devoid of difficulties; for it is not often easy to determine what is a constitutional trouble, or to distinguish the affections which result directly from the injury. Those observers whose studies tend in this direction should always bear in mind the three following questions:

1. Do the disease and the diathesis run a similar course, and present similar symptoms?
2. Does the injury modify the diathesis?
3. Does the result of the accidents present anomalies attributable to the constitutional diathesis?

These relations, which are very evident in syphilis, scrofula and alcoholism, are less known and more difficult to appreciate in joint affections.

We have a proof of this, for example, in cases of operations for the radical cure of cancer of the breast in women, which cancer is intimately connected with rheumatism, as has been shown by M. Bazin. Now, it is well known that when such cancerous patients are operated on, the injury does not necessarily develop in them unmistakable rheumatismal manifestations; still less are we able to judge from the diathesis what will be the intensity of the traumatic fever.

1. The influence of rheumatism on the injured point is very unimportant with reference to both the course and repair of the injury; and in this respect rheumatism differs remarkably from syphilis, from scrofula, and even from gout. Rheumatism does not favor the formation of pus, but it is the determining cause of serous effusions, local or general, enlargements, œdema, serous infiltrations, &c.

2. The influence of an injury on rheumatism is very conside-

rable and very evident, and very frequently manifests itself. After such an injury an old rheumatic patient, or one suffering from rheumatism at the time, is taken with arthritic affections more or less grave—multiple inflammations of the joints, central troubles, pericarditis, cutaneous eruptions, &c. In such cases, the differential diagnosis between certain rheumatismal affections and pyæmia is embarrassing. In a word, injuries in rheumatic persons either arouse or revive the inflammation.

On the Vomiting and Diarrhœa of Children.—The investigations by Dr. A. Baginsky (*Jahb. f. Kinderheißb.* VIII January, 3 Heft.) relate especially to the connection which exists, or is supposed to exist, between the height of the ground water, the temperature of the air and of the earth, and the mortality from diarrhœa, &c., in children. The investigations were made in and around North Berlin in 1874.

A comparison of the rate of mortality from affections of the intestinal canal with the height of the ground water, extending over a period from the 1st of April to the 1st of November, and of the mortality in single months in the course of this time, shows the mortality from these affections is entirely independent of the rise or fall of the ground water.

A second comparison of the rate of mortality with the temperature of the atmosphere, conducted during the same months, showed that there was a very close relationship between an elevation of temperature and an increase in the rate of mortality all the time, except during the month of September. When the comparison was made weekly instead of monthly, it was found that the rise of temperature and the increase in the rate of mortality was not coincident, but that the latter usually followed about a week after the former. It was found further that the exception presented during the month of September was only apparent and not real, and there could be no doubt that *the rate of mortality from diarrhœa and vomiting in children was in direct proportion to the elevation of the temperature of the atmosphere.*

No connection was found to exist between the temperature of the ground and the mortality in the affections named.

With respect to the connection between diarrhœa and the construction, &c., of dwelling houses, Dr. B. could say nothing.

Dr. Schwabe was of opinion, with reference to this point, that cellar rooms were "hot-beds" for diarrhœa and kindred affections, although in general (in Berlin) the mortality among the occupants of cellar rooms was quite small, which was due to the fact that these persons generally belonged to a comparatively well-to-do class. Improper food, Dr. B. thinks, plays a very important part in the causation of these affections. The "ultimate" cause, however, he thinks, is to be found in the decomposition of organic matter. An elevated temperature, dampness and deficient ventilation are the conditions which are especially favorable for such decomposition, and these conditions are found in a high degree in cellar rooms. It is plain, furthermore, that this injurious matter may gain access to the body either through the respiratory organs, or it may be taken in with the food—diarrhœa, &c., being caused under both circumstances. In the stools of the patients seen by Dr. Baginsky were found great numbers of staff-shaped bacteria, and the "*bacterium termo*" (of Cohn) was occasionally found in severe cases.

[The treatment which he recommends presents no points of especial interest.—W. C. D.]

Prolonged Baths and their Action.—In this paper, by Dr. Kisch (*Maninbad. Jahrb. f. Balneal., Hydrol. & Klinatol.*, 1875, I Band), the value of prolonged baths, which seem to have fallen into disuse, is considered. By *prolonged* baths, the author means those "in which the patients remain for many hours or the whole day." He begs that a trial be given them at the various bathing establishments. He then discusses the uses of prolonged baths, both general and local. According to his views, prolonged baths—the temperature of the water being from 37° to 38°C. [98.6° to 100.4°F.]—are a very powerful means of calming excited and irritated nerves, of acting upon and promoting the secretions of the body, and finally of accelerating the healing of open wounds and ulcers. He has found them a powerful anæsthetic in hyperæsthesia and neuralgia; also, in cases where the cutis has been removed. He has also found them of great service in promoting absorption, and the casting off of the epidermis; they are a powerful agent in accelerating granulation and cicatrization; and finally, in acting upon *nutrition* generally, and causing the removal from the body of effete matter.

These prolonged baths are especially indicated (1) In hyperæsthesia of various parts—neuralgia, hypochondria and hysteria. (2) In the course of acute and chronic affections of the skin, such as variola, erysipelas, ichthyosis, prurigo, herpes, psoriasis, pemphigus, &c. (3) In ulcers, especially of an atonic character (such as old sores of the feet), in wounds, burns, extensive losses of the epidermis, and when there is considerable destruction of tissue. (4) In scrofula, syphilis and mercurialism. (5) In old exudations into the muscles, joints and bones, in rheumatism, arthritis, periostitis, and incrustations.

[Dr. Kisch is decidedly too enthusiastic on the subject of baths, but his paper is a very interesting one, and there is, doubtless, *much* in it that is valuable.—W. C. D.]

Original Communications.

[Owing to the lateness of the receipt of this article, it appears out of its regular order.—Ed.]

ART. VII.—*The Repair of Fractures, with some Observations on the Probabilities of Shortening.* By E. T. EASLEY, A.M., M.D., Little Rock, Ark.

The subject to which attention is now invited, whether we regard it as a pathological study or view it in the light of its practical bearings, is one well calculated to challenge investigation.

At the meeting of the American Medical Association at Detroit, in 1874, Dr. Sayre, of New York, presented a very interesting report on *fractures and their treatment*. In that paper the distinguished author gave a number of cases of fractured femur treated without shortening. Dr. Sayre's contribution was undoubtedly a most valuable one, for considering his great industry, his vast capacity to labor, and his fulness of knowledge, few men now living have a better right to claim splendid results in operative surgery; and especially to orthopædic surgery has he given the benefit of a genius fertile in resources and eminently inventive. The paper in question, it was expected, would not escape remark; but I confess that I was not prepared for the storm of criticism which it encountered. Two sessions of the

surgical section of the Association were principally consumed in discussing its merits. It was urged that after fracture we are to prepare ourselves, and our patient, and our patient's friends, for shortening as a part of the result. Now that this shortening does take place in by far the larger number of cases is what we are all very ready to allow; why it occurs so frequently, will be considered further on.

But there were gentlemen who went still further, and insisted that shortening was an inevitable consequence of fracture of the long bones; not a few were inclined to this opinion. They who entertained this view claimed that the comparison held good between the condensation of reparative material in bone and that which occurs by cicatricial contraction in the soft tissues; whereas the fact is, that although the steps of repair are the same in all structures, the results are as different as are the elements that go to make up reparative material; and this very fact constitutes the difficulty in the analogy. This material, it may be remarked in passing, is fully adequate, we all admit, in osseous structure to renew the strength of the bone by deposition in its short axis; and it would be singular if, under proper conditions, it failed to supply sufficient length to the injured member. As may be inferred from what has already been said, this paper dissents from the view that shortening must absolutely occur in fracture of the femur. Such a conclusion, it is held, does not accord well with the reasoning or the facts in the case. It is thought that they who so argue lose sight of the great and efficient efforts which nature makes in other morbid conditions to restore normal power and function.

The efforts at compensation are not less striking in the osseous system than elsewhere. We find that when a bone is weakened or injured, a corresponding increase in the development of contiguous bone occurs. Interesting examples of this compensating hypertrophy are found in ill-repaired fractures or disease of the tibia. The fibula at the point corresponding to the weak point in the tibia is, in such cases, so strengthened as to support the limb—in other words, to do the office of both bones. It may be said that the increased demand made upon a part induces a greater flux of nutritive material. It is true that this is the mode in which the enlargement takes place; but so far from affecting

the point we wish to make, it shows clearly enough that nature is always ready to respond promptly and faithfully to the requirements made of her.

Singular as it may appear, and in beautiful accord with this law of compensation, bones have been known to become elongated. In Holden's celebrated case, as cited by Paget, the left tibia was an inch short, and yet that whole limb was as long as its fellow; for without any apparent morbid change of texture, the left femur had so grown as to compensate the shortening of the tibia. The reproduction of bone in its entirety is a thing within surgical observation. This remarkable phenomenon has been known to take place when the periosteum investing the structure was almost entirely absent. Professor Keller, of Louisville, has given such a case of the reproduction of the clavicle, the amount of periosteum present being only a mere slip. Were this a proper occasion, it would be curious and instructive to enquire what part the periosteum really plays in the formation of bone.

These principles of repair, compensation and reproduction, to which allusion has been made, so far as living beings are concerned, obtain universally. Their operations are much more rapid and complete in some of the lower animals than in man. In some species, indeed, not only are entire parts reproduced, but the animal being divided and redivided, each segment has the power of reconstructing a whole and perfect body. This is what happened with Henle's Hydra. "I cut him in two pieces," says the great naturalist, "and each piece became a separate animal as perfect as the original; one of these new ones was again divided three times, and lo! four entire hydras came forth."

The object in dwelling on the physiological capabilities of organized parts, is to show something of the ability of natural laws, for it is incredible that nature, which compensates for weak bones, which always strengthens fractured ones, and reproduces lost parts, should be incompetent to the task of adjusting the length of a limb, when properly aided by our art under conditions favorable to her operations. It has been said so often that I must apologize for again calling attention to the fact—the largest in physiology—that vital processes are always and uniformly exerting themselves to repair lesions of all sorts, and it may be added that it is upon an understanding of this proposi-

tion alone that we dare to practise our profession. The perfection attained, and the anxiety, if I may say so, to secure entire restoration, are wonderful things. Reparative material is at times superabundant; almost every one has seen cases in which it was so. It is fair to assume, as to the case we are considering, that no exception would be made to a rule of such general prevalence. It may be asserted that no necessity exists for failure here, and if it occur it must be due to other causes inseparable from the fracture. The formative processes to which allusion has been made, dependent as they are on the laws of nutrition and assimilation, are not at any time inactive in the living frame, but, on the contrary, are in a constant state of reproductive energy. It is in this way that portions of the body, disintegrated and worthless, are in their turn, as their predecessors have been, cast off and replaced, and the maintenance of the system as an entity secured. These processes, existing in the very nature of things, are not to be surprised—they are continually on the alert, and if not exactly identical with, are very near akin to those which govern nutrition and maintenance. These efforts are not matters of mere chance, but they seem governed by principles so definite as almost to indicate intelligence in the very structures themselves.

There is a fact in connection with this subject that we cannot afford to forget—one that intrudes itself on our notice every day. It may be conveniently formulated, thus: The ability to repair damage sustained bears an inverse ratio to the formative power already expended in growth and development. Hence, in accordance with this law, the tissues of those advanced in years heal less kindly than do those of the young, and the difficulty appears to increase exactly as does the age of the sufferer. This is a fact of familiar observation, and to it alone, other things being equal, we must often attribute the occurrence of ununited fracture.

With this apprehension of the matter, I have undertaken to show in my essay on the "Mortality of Amputations" that age has more to do with the death rate than any other circumstance inseparable from the operation. As to bones, as before intimated, they present no exceptions to the general rules that govern the growth or repair of other parts of the body. To this

statement may be added that they are subject, and subject only to those morbid changes in texture which effect other structures. We have, therefore, in osseous tissue, as elsewhere, atrophy, hypertrophy, inflammation, softening and other diseased phenomena, the consequence of injury or of simply defective nutrition. The analogy has been carried so far in order to show that the great principles of the laws of nutrition and repair are as applicable to wounded bones as to muscular fibre, arteries, tendons, or any other structures whatever. After all, who shall put a bound to the reparative process? After studying the amazing recuperation displayed so often under its supervision, who shall dare to define its extent?—who shall say to it “thus far and no further?” We may predicate favorable results on fortunate conditions, but we cannot tell what unusual efforts at entire restoration may be made under the most disadvantageous circumstances. Unlike ourselves, nature does not pause in emergencies to reason, to temporize—but her expedients are immediate, active, effectual.

And now, as pertinent to the present inquiry, we approach one of the most interesting subjects in the whole domain of surgery. I mean the manner in which the repair of a wounded bone takes place. It presents as fine an opportunity as can elsewhere be had for the practice of surgery as a science and art, and offers, perhaps, the most instructive illustration of the general principles of recovery. From the intra-uterine lesion to that which occurs in the imbecility of old age, we are continually reminded that the same modes of healing are observed, and that if union is to occur at all, it must occur and be governed by them. We are, then, to regard that of an injured bone as a typical example of repair. The progress and nature of repair, it is, of course, to be always understood, are modified by the character of the structures and the nature of the injury. For the interpretation of the facts in the recovery of a wounded bone, the theory of a blastema was long appealed to as the great authority. So long, indeed, as we have had any definite notions on the subject, the doctrine has enthralled men’s minds—the profession has all bowed to its influence. Nor is it surprising that it should have been so accepted; for whatever may be said of it now, it was most plausible. Until a very recent period it

bore the prestige of having passed the crucial test of the investigation of the ablest pathologists among us, and, more than all, it came to us associated with the traditional glory of the overshadowing name of John Hunter. This theory proposed that the repair of injuries was brought about by the exudation of new material of a plastic nature, capable of being organized, and that, by progressive changes, it assimilated itself to the character of the structure to be healed.

The most important of these materials was undeniably lymph, or, as it was called in a general way, coagulable lymph. It has been taught that lymph, the product of acute inflammation, and that resulting from exudation in wounds, were very much alike. They both show by their spontaneous coagulation that they contain fibrin, and, accepting the fact that fibrin was the chief constituent of lymph, it came to be regarded by the old pathologists as the essential element in repair. The principle characteristic of this coagulable lymph, and one which it had, as was claimed, of its own vital properties, was its tendency to develop itself. Thus it displayed itself as a plasma or blastema, and was to be classed with those other fluids, such as semen and chyle, that manifest the capacity to assume organic structure. The steps observed in the process were said to be these: the exudation of lymph, its successive organization into the fibrous, fibro-cellular or connective tissue, the lowest form of vascular tissue, into cartilage, and finally into the proper osseous structure. But from this routine there might be and often were departures. For example, fibrous tissue might at once proceed to ossification without the formation of cartilage, or, on the other hand, this lymph, to which such great capacity had been granted, might go on to the development of cartilage without the intervention of fibrous tissue.

Just here there are a few facts that bear singularly on the point we have been trying to reach. The character of the connective tissue that is formed in repair is adapted in both its chemical and physical properties to that of the parts it is designed to unite. The bond of union for a tendon is obviously much tougher than that of a common scar in the skin, and of course that of a bone must be much more dense than either. There seems, then, to be a special development of uniting mate-

rial in adaptation to special purposes or injuries. In all this there is nothing which suggests any incapacity to effect full restitution. If there is to be contraction, condensation, is not the material abundant to compensate for the process? The blood poured out into the adjacent parts was never accounted an important factor in this theory of repair. It was alleged, and correctly enough, that extravasated blood was most usually absorbed, rarely broke down in suppuration, and still more rarely became organized. This theory has been dwelt upon in order to show that, even accepting it as true, there is nothing about it which warrants the assertion that shortening must follow fracture. We have been discussing its practical bearings and not its merits, for, in my judgment, it has had its day, and a brilliant day it was. Venerable as it is, and proud as are its associations, it should now be put away as a thing of the past. We have abandoned it within a period so recent that all remember when the master at Berlin began to dictate pathology to the world. Now, when portions of bone are placed and kept in exact apposition, they may be united without any new material being formed for their connection—a continuity of vessels being restored as in the adhesive union of soft parts. There does not appear to be any good reason why impacted fractures may not so unite, if we are careful not to break away the impaction of the fragments. Clearly enough, in this case there can be no shortening.

The new pathology that has now come to be of very general acceptance lays down as fundamental the propositions: that no cell is formed *de novo* out of non-cellular material; that no "developed tissue can be traced back, either to any large or small simple element, unless it be to a cell." In other words, and plainly, it declares that repair is the result of the organization of any exudation or new material. It presents as striking a contrast as could well be conceived to the doctrine which it has in a great measure supplanted. This, perhaps the most important advance in modern pathology, we owe to the big, tireless brain of Virchow; and he has elaborated the grand conception in a style as classical as Watson's, and with a reasoning as profound as that of Descartes. Through the labor of the life of this man, a revolution in men's ideas has been effected. In this

way it was that the doctrine of new formation which Hunter gave us, which Paget labored to perfect, and which the Vienna school with Rokitanski at its head, has toiled for half a century to place on a certain foundation, fell to the ground. So it was when this new Sampson of a higher dispensation shook the pillars of this stately temple; it came down a mass of glittering ruins—aye, glittering, for in the *débris* was the shining gold of many an imperishable thought.

Accepting all the postulates of this doctrine, I go as far as the great cellular pathologist himself has gone, and do not hesitate to announce my conviction that there is no such physiological or pathological condition as that in which cells have ceased to exist; and this proposition is held to be true of all tissues. According to this doctrine, growth and repair are brought about by the agency and proliferation of pre-existing cells, and not by any new material, just as ichor and other morbid inflammatory products are the result of the retrograde metamorphosis of cellular elements. As applied to fractures, it proposes that the repair is a consequence of the proliferation of the inner periosteal layer, and of the multiplication of the individual cells in the connective tissue about the part. On this very subject of the growth of bone, Virchow has himself said, "They are too hard and thick for any one to talk about the presence of blastema or exudation in their proper parenchyma." The old exudation theory will appear singularly unfortunate when we remember that repair cannot be said to have begun until the extravasated blood has been absorbed. It is true that this blood, as Paget has shown, may become organized, but such cases are extremely rare, and do not effect the rule that it breaks down in suppuration or is absorbed—most usually the latter. Considering the small and infrequent part which the blood plays as an agent in repair, we naturally come back to the cellular hypothesis. In even a very casual examination of the labors of Virchow, the conviction is clearly acquired that "cellular elements extend down to the very surface of the connective tissue, and there is no where a spot where free blastema or fluid exists," but that on the contrary it is especially the deepest layers which contain the most densely crowded cells, and that in both connective tissue and periosteum the search for an exudation has been vain. The cells which re-

sult from the proliferation of the periosteum are converted into bone corpuscles, and the greater the irritation or injury, the more considerable will be the proliferation and swelling around the growing or uniting point. In the celebrated discussion between Stricker and Cohnheim, whatever else was proven, this much at least was definitely determined:—in all inflammations cell elements multiply.

Anything like a review of this doctrine is now impracticable; a statement of its chief points only is attempted. In all the wide range of pathological research it has cast a flood of light on the most obscure phenomena; especially has it explained processes in the formation of heterologous tumors that were before inexplicable, and its practical value is simply inestimable.

I have tried to show that in the theory of an exudation and an organization, there does not appear to be any absolute necessity for shortening; there is still less reason for such a postulate in the doctrine of cell multiplication and transformation. Accepting as true the proposition that the elements of repair are already in existence, and only require proliferation for the perfection of the process, there can be no cause physiologically for any inadequate result. For if it be said that because of condensation sclerosis must occur, it cannot be gainsaid that the rapid increase of cell development is fully competent to supply the slight loss of space thus occasioned. The gentleman on the floor of the surgical section of the American Medical Association is not the only pathologist who has made the grievous error of comparing the cicatrization of soft structures to that of bone. He was wrong, in the first place, in adopting the old exudation theory, and behind the present state of our knowledge; wrong again because, although there is some analogy in the steps observed everywhere in repair, the reparative material must be different, and the condition of the repaired parts must also be different. Let us remember the great fact that Nature's repaired conditions are those which approach as nearly as possible to normal structure. How the gentleman came to describe the repair of a fracture as a process of softening, is one of those things, as Lord Dundreary says in the play, "that no fellow can find out." I have heard it described, and well described, as a process of hardening, as a process in which reparative material

being deposited of fibrous or cartilaginous consistence became gradually ossified or even sclerotic. This material, as has been before said, sometimes goes through its stages very rapidly, apparently making haste to fill up the void which its absence creates. Now, the only softening that I know of in this connection is that which takes place when fragments of bone are not in apposition. Here first the earthy constituents are absorbed, and the overlapping or protruding bone is rounded down to a line with the connective callus, and this is really more of a necrosis than what ordinarily occurs in pathological softening. A spicula or angle of bone is in this way gradually softened down and the cartilaginous tip removed by absorption. Ensheathing or provisional callus we never have, of course, when parts are placed in apposition and kept so. The idea of its existence and persistence is, I am satisfied, a fruitful source of error. I once found a large, hard lump on the limb of a subject, and took it to be an unabsorbed callus from broken bone. A further examination showed the induration to be in the soft parts, and not a deposit in the bone, although there had been a fracture which was well united. A mistake might well occur in regard to the nature of such a deformity, and shortening be alleged where none, in fact, exists.

If the bones are properly "set" and united under favorable conditions, shortening is seldom a serious matter. Often when it does exist, it amounts to no more than the eighth or sixteenth of an inch; and when it does not exist, those who are determined to find it, readily stretch their imaginations that far. A boy of 15, with fractured femur, was laid on the table in Detroit, and examined by several gentlemen, and, I believe, no two of them agreed as to the nature of the injury, or, indeed, as to the limb injured. No argument could more emphatically assert the difficulty that those labor under who declare that shortening always follows fracture, nor can anything be more deceptive than the appearance of a limb after convalescence. We are told to compare the limb that has been wounded with the sound one, and this is the proper thing to do before giving an opinion. But this, particularly if the diagnosis be a very nice point, does not always give us an idea precisely right.

I cannot help remarking here on the much greater rapidity

with which repair goes on in the lower animals as compared with that in man, and on the greater abundance of the callus. We find in them that the absorption of projecting fragments is comparatively rare—the rule being that the entire seat of injury is enveloped in the repairing callus. They practice no surgery, and do not interdict motion, or enjoin “absolute rest,” as the phrase is, and consequently a greater flux of nutritive material goes to the suffering part. Ought this not to teach us a useful lesson—at any rate teach us the demand for passive motion and friction at as early a period as practicable? I do not mean now to argue the matter, but I am as sure as I can be that we have been too much trammelled by the idea of protracted fixation as a necessity in the treatment of fractures. Although in the lower orders the deformity may be very great, the strength of the limb is nearly always such as to make the member useful. I have alluded to this matter that I might submit whether it is not likely that cases of ununited fracture may be traceable to too close an observance of the old dictum, “rest.” Especially does the probability suggest itself to us in the old, in whom naturally the vital powers are at a low ebb. The pendulum is gradually swinging away from this practice in the treatment of chronic ulcers, and doubtless the idea will be more fully recognized in that of injured bone. We have all had occasion to observe the ready change which takes place when a patient, long bed-ridden, is allowed to go out into the open air on crutches. Prompt amendment follows, the general health rapidly improves, and the process of repair, having received a new impulse, steadily advances to completion. I am aware that many surgeons differ from these views. It is better, they say, for recovery to proceed more slowly than to be jeopardized by this early resort to motion. But let it be remembered that the great improvements in immovable apparatus in the last few years renders such motion not only possible but politic. It seems inexcusable, then, to deprive a patient of the advantage to be derived from such treatment.

I have now tried to show that there is nothing in the physiological processes of repair to indicate a necessity for shortening. We divide a tendon, as the tendo Achillis, and trust to the exudation (or proliferation, as it may be,) of reparative material to

increase its length; and so sure is the process that the operation of tenotomy is known as one of the simplest and most successful in surgery. I have collected a number of cases from various sources which bear directly on the point in question, but at present I cannot ask attention to them.

I wish to say something of the reason why shortening is really so common. The chief cause, *the* cause, as I apprehend, is a want of coaptation in the fragments. Should extension be too great, especially if there be vice of constitution, we are to fear ununited fracture; but, on the other hand, should the fragments overlap each other, we will have an ever-varying degree of shortening. This, therefore, is the great point to be attained—the securing and preservation of precise apposition. I am well apprised of the difficulties that attend it, and the liability to deception in even the most painstaking adjustment. I do not magnify the trouble when I say that it is next to impossible if the soft texture be dense as in fractured femur, or much infiltrated, to determine when the parts are in proper relation. This has been a very “Slough of Despondency” to the profession. Fractures have been often treated all along under the impression that the parts were as favorably situated as possible, until the delusion was dissipated by the unrelenting fact of shortening, and the surgeon has made haste to say that this result was inevitable. In some cases, indeed, in many, this assertion, in a certain sense, is true, for nothing is left undone that could be done to accurately adjust the broken bone; but it is not true in the sense that shortening is a defect unprovided for in the processes of repair. Of course it is well enough, and the right thing, to inform all parties that the deformity is most likely to occur, for occur it does and will, notwithstanding our best efforts; but let us not have any misconceptions in relation to the subject ourselves. So long as our notions of the pathology involved are correct, a proper treatment surely follows. Although there are many cases in which shortening seems to be unavoidable—many most carefully cared for that give the surgeon only chagrin and disappointment—there can be no doubt that the treatment has often much to do with the unfortunate result, and that results surprisingly good are frequently attained under unfavorable aspects—not by mere chance, but by careful management. Mr.

Erichsen says of his experience with the immovable apparatus : "Patients have been frequently cured without any shortening whatever, and with the preservation of the natural curvature of the limb."

Among the appliances devised by modern surgery for dressing fractures, it is safe to say that the fixed, starch, dextrin or plaster bandage is beyond comparison best. But while it is a means so potent for good when properly used, let it never be forgotten that it is an agent fearful in its capacity to do harm when injudiciously applied. Of all the different forms of a fixed dressing, I think, ordinarily, I should prefer the immovable Bavarian bandage, both on account of the ease with which it may be applied, and the readiness with which it may be removed or modified.

Proceedings of Societies.

MOBILE MEDICAL SOCIETY.

(Reported by W. D. Bizzell, M. D.)

January 15, 1876.—**Epileptiform Neuralgia.**—Dr. Cochran, about a year ago, was called to a lady about 50 years of age, who seemed to be well nourished and healthy for one of her age, but who suffered from peculiar nervous symptoms. She described her symptoms to be a feeling of shock or sudden blow, commencing usually at the forehead or over one of the eyes, radiating thence over the head and face, lasting four or five seconds, and attended with twitching of the facial muscles. Sometimes these attacks would come on every three or four minutes during the day. Some days they would be comparatively slight and infrequent, while on other occasions they would be frequently repeated and severe. The attacks never came on at night. Dr. C. did not from the first consider it to be ordinary neuralgia, though he tried anti-neuralgic treatment. Thinking perhaps malaria might have something to do with it, he gave several doses of quinia, but without any effect. He also tried tincture of nux vomica and phosphorus without accomplishing any good. The lady then took, at the suggestion of one of her friends, with his consent, bromide of quinine ; this likewise did no good. Dr. C. then, suggested electricity, and though he would have preferred the continuous current, not being able to avail himself of it, he concluded to try the faradic. Called in Dr. Biz-

zell, and that gentleman applied a very fine and rapidly interrupted current, supplied from a battery of the Galvano-Faradic Company. This, too, seemed to have no effect, and was discontinued. After this, she received no treatment for several months, although she still suffered more or less from the "shocks." Appetite and digestion remained good during the winter of 1874-5. In the spring of 1875, while Dr. Cochran was away from the city, her general health became somewhat impaired, digestion was interfered with, and for the first time in the history of the case, pain was associated with the shocks. For these symptoms she was treated by Dr. W. H. Anderson. In the early part of the summer, her health had sufficiently improved to travel, and she went to Virginia, and from there to New York City, where she was stricken down by a most atrocious attack of her old enemy, "the shocks," which were now accompanied by intense pain, so severe as to cause delirium, and her life was despaired of. She was first treated by bromide of potash and hydrate of chloral, but obtained no relief. She then changed her physician, who, after a three days' study of the case, recommended and used the continuous current, together with cod liver oil and phosphorus. Whether from the medicine or whether the disease had spent its force, she slowly recovered, and returned home feeling much better. It was not long, however, before she was again worse. After reading Trousseau, Dr. Cochran became satisfied that his patient was suffering from what that great authority calls epileptiform neuralgia, and he determined to try the treatment by opium so highly commended by Trousseau, whose plan was to commence with moderate doses of opium, and gradually increase the amount given until the desired effect was produced. Dr. Cochran ordered twenty drops of chlorodine morning and evening. She improved rapidly, and was soon relieved of all the disagreeable symptoms. He continued the remedy in gradually decreasing doses, and finally stopped it altogether some three or four weeks since, and there has been as yet no disposition to a return of the symptoms.

Iodoform in Scrofula.—Dr. Cochran also reported the following case, which he supposed might be included under the broad domain of scrofula: A white female, age nearly 30; trouble commenced with pain in the left foot, attended with considerable swelling. About three years since, the pain and swelling then left the foot and went to the knee, where it remained for a long time, causing considerable enlargement of the bones at this point. Subsequently an abscess formed near the hip joint, which discharged a quantity of pus. She then had ulcerated sore throat, and the disease, extending up the pharynx, entered

the nose, and subsequently the left frontal sinus. She then suffered the most intense pain in the frontal region, accompanied by the discharge of large quantities of offensive pus. The whole scalp became covered with ulcers of a most painful character, and it was here that the disease for the first time attacked the right side of the body. When Dr. Cochran saw her she was suffering from ozæna and the open ulcers of the scalp. She stated that she had taken immense quantities of medicine—mercury, iodide of potash, etc. Dr. Cochran concluded to try iodoform, which he gave her in six-grain doses three times a day, and applied to the ulcers a cerate containing red oxide of mercury. Under this treatment she improved, and is now nearly well.

Strangulated Scrotal Hernia.—Dr. Heustis reported the following: Patient adult male; the tumor in the scrotum about the size of the fist; had been strangulated about four hours when he first saw it. After trying for an hour, without effect, to reduce it, with the patient in every position, he began to think an operation would have to be done to relieve the incarcerated intestine. Introduced the needle of an hypodermic syringe to give exit to the gas in the tumor, but without much effect. He then removed all the gas and some of the fluid with an aspirator. After this, by careful and persistent effort for half an hour, he reduced the tumor, which he does not think would have been possible without the previous aspirations.

Iodoform in Otorrhœa.—Dr. Heustis also remarked that he had found a mixture of iodoform $\frac{3j}{\text{}}\text{}$, and glycerine $\frac{3j}{\text{}}\text{}$, most excellent to drop in the ear in cases of otorrhœa.

Temperature in Typhoid Fever.—Dr. Anderson mentioned a case of typhoid fever lasting 41 days. The temperature was never higher than 104° , except on the 28th day, when it went up to 104.5° . On the 27th day the temperature dropped down to 97.5° , and he thought the fever was over, but on the next day he was surprised to find the boy restless, pulse 130, and temperature 104.5° . On the 41st day from the commencement, the temperature was normal, and on the 44th day it was $97\frac{1}{2}$. The treatment was liberal feeding, chlorate of potash, and tinct. veratrum viride, in small doses, when deemed necessary.

Gastric Ulcer.—Dr. Bizzell reported the case of a mulatto, male, about 35 or 40 years of age, a convict in the county jail. He had not exhibited any signs of serious illness previously, though he was scrofulous and had enlargement and suppuration of the anterior cervical glands. He had also, for several days previous to the first manifestations of the ulcer, complained to some of his fellow prisoners of a cold, cramp-like feeling in his lower

limbs, which he was disposed to attribute to the close confinement to his cell since his conviction. Suddenly, and without premonition, he began to vomit quantities of blood, which continued to a greater or less extent until the Doctor arrived an hour afterward. The amount by this time must have exceeded two pints. He was then pulseless, cold, and, apparently, almost at death's door. Gave an enema of milk and brandy, and had the patient removed from the cell to a warm and comfortable room, good bed, and hot bottles to his icy-cold feet. The patient continuing to bring up blood in small quantities, the Doctor ordered that he be kept perfectly quiet; injected $\frac{1}{6}$ grain of ergotin under the skin, and gave small lumps of ice by the mouth. The bleeding soon ceased. For the reactionary fever, quinine was added to his nutrition, and whiskey enemata. He was not allowed food by the stomach for nearly a week—being fed exclusively by enemata of beef tea, etc. Though he took nothing in his stomach but the water from the ice lumps, he still suffered more or less from nausea, and occasionally vomited; and when the vomiting was accompanied by straining, as it sometimes was, there would be a little blood mixed with the vomited matter. Also, for several days subsequent to the first large hæmorrhage, the fecal evacuations were large, dark and tarry, showing that the amount of blood lost was far greater than the amount vomited had seemed to indicate, and accounted for the great and almost fatal prostration in which Dr. Bizzell found him. After the first hæmorrhage, the patient complained of an intense, lancing pain over the cardiac region of the stomach, and also over the opposite region of the back. Small hypodermic doses of morphine in the abdominal walls gave great relief to this symptom. The patient is now taking light food by the mouth, and occasional enemata of beef tea, and seems to be doing as well as one could expect, though all the symptoms denoting the presence of the ulcer still exist.

Placenta Prævia.—Dr. F. A. Ross reported the case of a lady from the country, married for ten years, but who had never before been pregnant. The Doctor was sent for late in the evening. The waters had been discharged, and the pains were coming on about every thirty minutes, but were comparatively slight, and the os had not dilated to any great extent. As he did not expect the labor to be soon completed, he left her after giving proper directions, and did not see her again till next morning. Os still only slightly dilated and pains comparatively infrequent; yet he saw no reason for haste; he was, however, with the patient at intervals of every three hours during the day. At 3 P. M., he was summoned in haste with the statement that the

patient was flooding. He found her losing considerable blood. The os had partially dilated since he saw her last, and on introducing his finger he found that he had to do with a case of placenta prævia. With his finger, Dr. R. detached that portion of the placenta immediately surrounding the os, and gave ergot, hoping that the presence of the descending head would check the hæmorrhage. Blood continued to flow in small quantities, and the pains remained inefficient, coming on only every half hour. After waiting for some time without much improvement, he sent for Dr. Gaines, who delivered the lady with the long forceps, the head presenting in the first position. The child, as is usual in such cases, was still-born. The lady continued to lose more or less blood, and examination showed that a considerable portion of the placental surface was still attached to the uterine walls. This was with great difficulty separated and removed. By this time the patient was quite exsanguine, and died in about two hours. Dr. Ross remarked that this was one of those unfortunate cases that will sometimes fall to the lot of the practitioner, and in reviewing it he did not feel that anything had been neglected that would have prevented the sad finale, except, possibly, transfusion; and not having the requisite apparatus, he was unable to do that.

Dr. Gaines remarked that he believed the case had been managed as well as possible under the circumstances. He had no doubt the lady would have survived if it had not been for the loss of blood after the birth of the child, caused by the forcible separation of the adherent placenta.

RICHMOND ACADEMY OF MEDICINE.

February 3, 1876.—**Infantile Tetanus—Recovery.**—Dr. C. Tompkins reported the case of an infant attacked, when twelve days old, with well marked opisthotonos and trismus, without known cause. There was no trouble about the umbilicus. At first, the treatment consisted of a dose of calomel, which was followed by one of castor oil. Potassium bromide was also given every second hour. There being no improvement on the following day, he gave chloral hydrate, gr. j, every fifth hour. The intervals between the doses of chloral were shortened on each successive day until the fourth, when the tetanic convulsions were less frequent, but more violent. The chloral treatment was pushed, and the infant recovered. The postural treatment, as recommended by Dr. Sims, was also employed, and in addition hot poultices were applied along the spine.

Dr. J. G. Skelton had met with a case of infantile lockjaw in

an infant three days old. The mother was a primapara, and the labor being prolonged, forceps were used in the delivery, which abraded the child's scalp. Dr. S. attributed the trouble in this particular case to injury of the brain by the forceps. He observed in this, as in other cases, suppression of urine as a symptom, or at least as a co-existent trouble. Treatment consisted of, first, a dose of castor oil, and then of one-grain doses of chloral hydrate. The infant recovered.

Other cases of infantile lockjaw seen by Dr. S., were attributed to intestinal irritation, and were cured mostly by aperient doses of calomel, oil or magnesia, followed by twenty-drop doses of Dewees' carminative every four hours, or its equivalent.

In two cases, however, in which the above remedies did no good, teaspoonful doses of a mixture of indigo, 3j, and lard, 3j, given by a very intelligent lady, were followed by the happiest results. He would not attempt to explain the *modus operandi*.

Dr. H. H. Levy had several times observed, while making autopsies of very young infants, marked deficiency of bony matter in portions of the parietal and occipital bones. He could very well conceive that if the infant's head rested upon one of these soft places, the brain itself would be subjected to pressure. He thought, therefore, that certain cases of infantile tetanus might be due indirectly to the existence of local bony insufficiencies. In such instances, the treatment by frequent change of the child's position seemed rational.

Dr. E. T. Robinson had seen a case of infantile tetanus in a negro, five days old. The disease developed itself twenty-four hours before he was called in. Suppression of urine being so well marked as a symptom, he directed his treatment principally to relief of that condition, and recovery followed.

Vaccination Sequel.—Dr. W. A. Lee, on the eighth day after vaccinating a child, found an opaque, pearly white, papular eruption on the child's face, arms and body, with fever and pains in the back and limbs. The papules contained no fluid, and there were no inflammatory marks about their bases.

The President, Dr. R. T. Coleman, had seen similar instances.

Diphtheria Cases.—Dr. W. W. Parker has recently met with several cases of sore throat in adults, attended with white patches as of false membrane about the tonsils and pharynx, not succeeded by ulceration, nor did the patients exhibit that debility considered characteristic of diphtheria. They soon recovered after local applications of turpentine. Should such cases be classed as diphtheria?

Dr. J. G. Skelton thinks Dr. Parker's cases are cases of diph-

theria of a very mild type. He regards the deposit of a firm white membrane upon a mucous surface as characteristic of the disease.

The President thinks that Dr. Parker's cases are diphtheritic, and that if the patients are kept under observation for some time they will be debilitated. In such cases in adults he gives tonics for a long time after the attack—no matter how mild. The utmost care should be taken with children under similar circumstances, to prevent them from being unduly exposed for some time after apparent recovery. He cited the case of a child who had a mild attack of a case of diphtheria, in which the deposit had disappeared in three or four days. The child was then permitted to run about in play, and a relapse occurred, which ended fatally in a short while. Dr. C. also mentioned the case of a gentleman, in whom the deposit disappeared in 24 hours, but he complained of debility for a long time afterwards.

Dr. Skelton mentioned a case in which strabismus was a sequel of diphtheria.

Softening of the Brain.—Dr. W. W. Parker stated that this condition often exists for long periods without being suspected. For example, the mental faculties of a man, whom he knew, seemed unimpaired 24 hours before his death; yet, *post mortem*, the brain was found to be of the consistence of clabber. He had also upon one occasion found a similar state of the brain in a child, in whom the condition was not suspected until shortly before death. The softening had evidently existed for weeks.

Dr. Tompkins remarked that, to be sure the softening was not a *post mortem* change, the autopsy should have been made shortly after death.

Dr. L. B. Edwards described softening of the brain by the term necrosis. While undoubtedly occlusion of cerebral blood vessels is by far the most frequent cause, he thinks that sometimes ramolissement results from a *sui generis* breaking down of brain cells. Nerve cells have an inherent irritability not solely dependent on the immediate blood supply. Beyond the symptoms laid down in the usual text-books, the thermometer is now coming more prominently in the field as an aid to diagnosis. For instance, Bourneville's investigations show that, in acute softening, not affecting the pons Varolii, for the first hour or two after the comatose attack, the rectal temperature ranges between 98.6° and 100°F.; after the third hour sets in, it suddenly rises to 102° or 104°, but soon descends to the normal, and then is oscillatory. On the other hand, during the first two hours after cerebral hæmorrhage, the rectal temperature is almost always below 98.6°F.; if it afterwards rises beyond 102.5°, it rarely

sinks to the normal, except as the result of a second hæmorrhage. Towards the approach of fatal termination in either case, however, the mercury rises, but this rise is slower in softening than in hæmorrhage, and rarely exceeds 103° or 104° , unless the pons Varolii be implicated, when it may mount up even to 110° at the moment of death—just as occurs in some cases of cerebral hæmorrhage. Durand Farbel remarks upon increased flow of saliva and tears as a significant symptom of white softening. Other symptoms mentioned in the textbooks were referred to. The important question to us as physicians is: Is there hope for recovery? If so, how is it to be obtained? There can be no question that recoveries have taken place—or at least that the disease has been permanently checked in its progress; but notwithstanding these recorded facts, in general practice the prognosis is always serious. In the acute stage, the inflammatory complications should be met on general principles. In the chronic form, or when the acute inflammatory condition has passed off, energetic, nutritious feeding is important. Phosphorus and strychnia, in combination, are the best tonic agents. To prevent the brain necrosis from extending beyond the original locality, try to establish collateral circulation, so as to keep the parts beyond the affected seat nourished by supplies of blood. The judicious use of nitrite of amyl, long continued, three or four times a day, suggests itself as an agent for this purpose.

February 17th.—**Fœtal Monstrosity.**—Dr. George Ross exhibited, as a pathological specimen, one of a pair of twins, white, which he had recently delivered. The body was small and undeveloped, and there was only a rudimentary arm on one side. It was born at the moment of rupture of the membranes, enveloped in a sac of its own. It had no placenta, and only the point of a cord, as it were, existed. The other child was afterwards delivered as a live birth, was fully developed and healthy.

Perineal Abscess, with Sloughing of the Scrotum.—Dr. Chas. Macgill had recently attended, with Dr. O. Fairfax, a case of perineal abscess, causing such extensive swelling of the perineum and scrotum as to cause retention of urine; the introduction of a catheter into the bladder was impossible. The bladder was tapped through the rectum, with immediate relief of symptoms. A drainage instrument was kept in for twelve days, and various applications were made to the parts. The scrotum, however, sloughed, but as soon as a line of demarcation was established, the testes were placed in tact, and confined with sutures. Tonic and supporting treatment was afterwards used, and the patient recovered.

Stone in the Bladder.—Dr. Hunter McGuire, in reply to a request from the Chair, reported several cases operated on by him a few days before. One of these cases was that of a woman, from whom he had removed a lithic acid calculus, weighing over two ounces, through the vesico-vaginal septum. The wound was closed with metallic sutures, and on the ninth day was found entirely united. She was discharged this morning, the 16th day, from the hospital, well. This is the third case of stone in the female bladder, out of 54 operations for stone by Dr. McGuire.

Another case was that of a young gentleman, aged 26 years, sent to him by Dr. Corbell, from Sussex county; has had symptoms of stone for six months. Upon examination with a sound and lithotrite, the urethra was found of good size, the bladder healthy, and the stone small and probably soft. After a week of careful preparatory treatment, upon which Dr. McGuire laid great stress, and which consisted chiefly of rest, the use of bougies, attention to the secretions, and the liberal use of a decoction of triticum repens and hops, the patient was put under the influence of chloroform and the operation performed. For small stones, Dr. McGuire uses a lithotrite with flat blades, made by Weiss, of London. In catching the stone he adopts the plan suggested by Brodie, and generally known as the "English method." This is done by elevating the handle of the lithotrite after its introduction into the bladder, and depressing the blades towards the rectum. After the blades are opened, the convex portion of the female blade is pressed against the posterior wall of the bladder, when the stone by its own weight usually drops into the grasp of the instrument. Failing to catch it in this way, he resorts to Civiale's method of searching for the stone with the lithotrite and picking it up with the instrument. He gives quinine after the operation, and keeps the patient on his back for twenty-four hours. At the end of this time he is allowed to get up and endeavor to pass the fragments. As an instance of the occasional and rather unusually rapid success of this operation, Dr. McG. stated that he operated on this gentleman Saturday at noon. The next day he passed all of the fragments; Monday he walked from his hotel to the Doctor's office, and on Tuesday returned to his home in Sussex county.

Cauliflower Excrescence of Cervix Uteri Removed.—Dr. F. D. Cunningham reported the case of a white woman, 33 years old, scrofulous temperament, delicate health, but who was improving for the past six or eight years until two months ago, when she had "a profuse menstrual discharge." Vaginal examination revealed the presence of a pyriform cauliflower excrescence, two inches in length, springing from the posterior lip of

cervix uteri. The anterior lip was also enlarged, but the body of the uterus was not involved. On account of persistent hæmorrhage, he removed the diseased part with an ecraseur. The diseased mass was three-fourths of an inch in diameter. Some hæmorrhage occurred immediately after the operation, which required the use of a cloth tampon in the vagina to check it. There has as yet been no return of the disease—now two months.

Dr. Tompkins made some remarks on *Pyæmia*—the subject for discussion.

March 2.—**Inflammation of Knee-joint—Amputation—Pathological Specimen.**—Dr. F. D. Cunningham exhibited the lower third of the femur which had been removed by an amputation from a gentleman about 40 years old. During the war he was struck on the leg by a spent fragment of shell, which gave him trouble; but he apparently recovered, and had good use of his limb until two years ago, when the knee-joint became inflamed. While under treatment, a fistulous opening made its way from the cavity of the knee-joint upwards and inwards, and discharged at a point about four inches above the joint on the inside of the thigh. By this channel constant drainage of purulent matter took place, which kept down the swelling of the knee and greatly relieved the pain. Last summer, however, he had a dreadful time, and while he has been able to attend to his (railroad office) duties since then, it was at the expense of great pain. He was formerly “loaded down” with tuberculous deposit in the lungs, as described by Dr. McCaw, but during the existence of the discharge by the fistula this condition was greatly ameliorated. After all the probabilities, pro and con, as to results of letting alone and amputation were told the gentleman, he decided for himself that he would rather risk an amputation than to suffer another season as he did last summer. Upon dissection of the leg after amputation, the articular surfaces of the femur, tibia and patella were all found to be very much diseased. In the specimen exhibited there was extensive erosion of the whitened diseased serous membrane of the femur, and the whole head of the bone was nearly double its natural size. The patient is now doing well.

A general discussion ensued as to the propriety of the operation. Dr. McCaw feared that there would be return of pulmonary phthisis. Dr. Parker was inclined to think the chances for the patient's life were as much, if not greater, with the leg on than off. He cited some cases of evidently extensive knee-joint trouble for which he would have operated had the patients consented; but in letting them have their way they have recovered health with stiff knees, which he thought better than no knees at all. Dr. Cunningham defended the propriety of opera-

tion in this case because of the uselessness of the limb to the patient as it was; the danger of curing up the fistula; the intense pain the limb occasioned; the necessity for the gentleman to attend to business; the failure of other means to do good; the demand of the patient himself, &c.

Fœtus with Teeth.—Dr. J. N. Upshur recently attended a woman in labor who gave birth at full term to a healthy infant which had two incisor teeth.

Atropia Hypodermically for Sciatica.—Dr. H. H. Levy, to relieve the rigid condition of the muscles of the thigh in a case of sciatica, hypodermically injected into the thigh atropia sulphate gr. $\frac{1}{60}$ th every second day at first, and then every third day, with benefit. He observed in this, as in other cases in which he had injected atropia into the lower extremities, that it did not dilate the pupils of the eyes as readily as the same dose when injected into the upper extremities.

Jaborandi in Diabetes Insipidus.—Dr. O. Fairfax reported two cases of diabetes insipidus in which he had successfully used half-drachm doses of a fluid extract of jaborandi, the dose of which, as stated on the label, is from ʒss. to ʒiiss. The first case was that of a lady who had been suffering for ten years with almost constant thirst and a diuresis that amounted to an average discharge of a gallon every three hours. There was no perspiratory action of the skin; bowels irregular, and there was progressive emaciation. The specific gravity of the urine was 1003. About three months ago he commenced the use of fluid extract of jaborandi in ʒss. doses at bed time. The salivation, however, was so profuse as to prevent any opportunity for sleep; hence the doses were diminished, and used three or four times daily. Yesterday she passed only three pints of urine in the twenty-four hours; specific gravity 1008. The appetite is improved. Other treatment had failed, except muriated tincture of iron, which in some measure relieved the extreme debility. The second case of insipid diabetes is of only four or five weeks standing. The specific gravity of this lady's urine was low, the diuresis very great, thirst intense, skin dry. The effect of the same fluid extract of jaborandi in ʒss. doses, twice daily, has been that of relieving all the symptoms—salivary glands active, skin moist, thirst relieved, appetite improved, the quantity of urine greatly diminished, and the specific gravity increased.

Dr. F. B. Watkins read the report of a *Case of Hour-glass Contraction with Adherent Placenta*, which is elsewhere published in this issue.

Amyl-Nitrite Locally for Obstructive and Neuralgic Dysmenorrhœa.—For some months past Dr. L. B. Edwards has treated

several cases of obstructive and neuralgic dysmenorrhœa by placing a gelatin capsule containing three or four drops of amyl-nitrite against the os uteri, while the patient is lying on her back. Within a few minutes the capsule dissolves and the amyl is poured out against the cervix, which sometimes causes a momentarily stinging pain about the part. The relief from pain is almost instantaneous, and in the cases of obstructive dysmenorrhœa the menstrual discharge is soon established regularly. The patient herself may introduce a second and a third capsule at intervals of four hours should the "young labor pains" recur. The Doctor's experience thus far is limited to five cases, but he has had opportunities to repeat the experiment in four of them. The treatment is not curative, of course, but palliative; however, in one case of neuralgic dysmenorrhœa the suffering was much less intense at the last period than at the former month, when the amyl was used. He thinks he has noticed a longer relief in the two last instances in which he has combined belladonna extract with the amyl in the capsules. The more general effect of amyl upon the capillaries of the upper portion of the body has not been observed after these vaginal applications. In ordering the capsules in the first instance, Dr. Edwards had half a dozen prepared at a neighboring apothecary. In about an hour, or less, the amyl had dissolved the capsules left in the pill box, and the odor of amyl pervaded the whole house. The lesson is, charge the capsules at the moment they are needed—not before.

Analyses, Selections, &c.

Damiana—Its Botany.—As the first article on damiana, published in this country, appeared in the *Monthly*, May, 1875, and as favorable reports concerning its therapeutical action are accumulating rapidly, we have compiled the following botanical description from a mass of correspondence in our possession:

Dr. D. G. Brinton, editorially (*Med. & Surg. Reporter*, March 4), calls attention to an article in the same number of his journal by Dr. J. T. Rothrock, of Wilkesbarre, Pa., which, it is claimed, "dispels wholly the mystery which charlatanism has endeavored to throw around this drug." Dr. R. describes a plant, received from Monterey under the name of damiana, which is well known to botanists as belonging to the family of "compositæ," genus "*Bigelovia*," of Gray, and described by Dr. Asa Gray as "*Bigelovia veneta*."

Mr. Wellcome has described (*Amer. Jour. Pharm.*, 1875. p. 518) three distinct plants—each of which goes by the name of damiana in the New York market. Two of these plants also are very different from the specimens that come from Dr. Helmick, of Washington, and which alone seems entitled to therapeutic respect. It is this latter specimen to which Dr. Caldwell's paper (*Va. Med. Monthly*, May, 1875,) relates. It is but due to Dr. Helmick to state that he has supplied a number of botanists with specimens, and has had the fairness to court investigation.

Since the appearance of Dr. Rothrock's article, it is also due to this author, as also to Dr. Asa Gray, to say for them that they have examined specimens furnished by Dr. Helmick himself, and they unhesitatingly affirm that it is a different botanical plant from that described in the *Reporter*.

During January, 1876, Mr. Lester F. Ward determined the plant to be a species of *Turnera*; and not finding a specimen in the National Herbarium, nor finding any satisfactory description of the species in De Candolle's *Prodromus*, or any accessible works, he proposed for it (without meaning thereby to endorse its alleged medicinal virtues, which must be decided by clinical experience) the provisional name *Turnera aphrodisiaca*, in case it should prove not to have already received a name. Dr. Gray "willingly leaves it in the hands of Messrs. Vasey and Ward," and Dr. Rothrock likewise yields his views "*concerning its botanical history*." We are advised that Professors Vasey and Ward, recognizing a new plant in the so-called "*Damiana*"—or at least one not described in any of the authorities—have recently fixed the botanical name of *Damiana* as *Turnera aphrodisiaca*. The following is the description given of the plant last January by Dr. Ward, and which description is now adopted:

"Calyx tubular, funnel form, the lobes shorter than the tube. Styles 3, distinct. Stigmas flabellate. Stems woody, the branches reddish, densely canescent or lanulose, as well as the petioles and lower portion of the midrib. Leaves obovate to oblanceolate, 6 to 9 lines long, 2 to 3 lines wide, on short petioles, strongly crenate-dentate, the teeth with revolute margins, prominently veined beneath, nearly glabrous above, glandular below, bearing fascicles of smaller leaves in their axils, together with the flowers. Flowers short pedicelled or nearly sessile, axillary or petiolar, *i. e.*, developed either from the center of axillary fascicles of minute leaves, or from between these and the base of the petioles, or, in some cases, from the petiole itself above its base; bibracteolate, the bracts ovate, long acuminate.

nate, ciliate. Anthers somewhat sagittate, introrse, the cells thin, ovaries dehiscent from the apex to near the base. Seeds large, long kidney-shaped or curved, grooved lengthwise and pitted; only a few maturing, the rest abortive and persistent."

Among other particulars in which *Turnera aphrodisiaca* differs from *T. carpinifolia*, with which it is most apt to be confounded, is the fact that the latter is a native of damp river bottoms in South America, while the former plant is found only on dry, rocky places in Western Mexico. In addition, a comparison of the above description of *T. aphrodisiaca* with that of *T. carpinifolia*, as found in De Candolle's *Prodromus*, shows a want of harmony in some of the most important characters. The leaves of that species are there described as oblong lanceolate, doubly serrate, pubescent and bi-glandular, in all of which positive characters (not to speak of certain negative ones too patent to be overlooked in a work of its kind), there is a want of correspondence.

We are no more disposed than Dr. Brinton to shield charlatanism; but we do think that a *new* agent (as this is shown to be by the above botanical description) that has been, and is being favorably mentioned by every other reporter than Dr. Brinton, should not be consigned to the "mysteries of charlatanism" by a single editor. When the agent is proven to be useless, let it be announced—not before.

Lithotomy under Difficulties—A Squirrel's Tail the Nucleus of a Calculus.—Dr. Hillary Ryan reports (*Trans. Texas Med. Ass'n*, 1875) that in December, 1871, he was told by John Frizzell that he had passed the tail of a squirrel into the urethra which had slipped from his hand and passed nearly into the bladder. On sounding him with a silver catheter, Dr. R. found a stony substance at the neck of the bladder. Operation was, however, delayed after a consultation of surgeons. In August, 1872, the Doctor was again summoned, and found his patient suffering very much, his urine dribbling, &c. The patient begged to be operated on, and Dr. R. finally consented, though he had carried no lithotomy instruments with him, and it was near midnight and he had no assistants except three boys. Rectum was emptied by enema, and the patient was chloroformed. A silver catheter was passed into the bladder and held by one of the boys. A small brass lamp was held by another boy, which furnished all the light available. The other boy managed the chloroform. The Doctor, with a pocket-knife, made the left lateral incision. He "then passed a probe-pointed bistoury into the urethra, holding the button close to the catheter, passing it down to the bladder,

then off to the left, leaving the anus 10 or 12 lines." The stone, about $1\frac{1}{4}$ inches long by 1 in diameter, was removed with a pair of forceps, after dilating the opening with the finger. He "then passed the catheter [again] into the bladder, and found a much larger stone, but had no forceps long enough to reach it." About this time the patient seemed to be dying (possibly from the chloroform), but he reacted under stimulants—turpentine, mustard, &c. The Doctor promised to operate again at a suitable time. •

Early in 1875, assisted by Dr. Oliver, the operation was performed, and "with some difficulty drew out a stone $1\frac{1}{2}$ inches thick by $3\frac{1}{2}$ long, and in it the squirrel's tail, of about 5 inches in length, $1\frac{1}{2}$ inches bent back on itself. It was in a good state of preservation, and looked very much like salted meat." The usual after-treatment was used. But it was 10 days before the Doctor again saw his patient, when he was passing his water naturally; stitches were now removed. Although the bladder was well washed out with a Davidson's syringe at the time of the operation, he informed the Doctor that he had passed a great many small stones. He has been well since the operation.

Pipe Stem the Nucleus of a Stone in the Bladder.—As another curious instance of a foreign body being the nucleus of a urinary calculus, we abstract the following from the *Canadian Journal of Medical Sciences*, March, 1876, reported by Mr. Jessop as having recently been in the Toronto General Hospital: About March 1, 1875, Thomas D., aged 38, while unconscious during intoxication, had a tobacco pipe stem passed into his penis by two men. He afterwards was the subject of exceedingly painful micturition; he passed mucus streaked with blood, and also a large quantity of white sediment in his urine. During January, 1876, lithotomy was performed, "when an oval-shaped calculus was removed, consisting of concentric layers of uric acid formed around a gutta percha pipe stem. * * * It was about three inches long, and over an inch in diameter in the thickest part, tapering towards its extremities."

In the Transactions of the Medical Society of Virginia, 1873, Dr. G. McDonald, of West Virginia, reports the case of a young girl of highly respectable parentage, in which a *hair pin* was the nucleus of a vesical calculus. Several similar instances have been reported in the journals.

Liquor Bismuthi for Hæmorrhoids and Prolapsus Ani.—Prof. John Cleland, of Queen's College, Galway, reports (*Practitioner*, Jan., 1876) the case of a middle-aged woman who could walk only with difficulty, inasmuch as when she parted her thighs the bowel

emerged and hung down for about six inches in folds of such a character as made it evident that at least half a yard of intestine was extruded—the whole mucous surface exposed being deep raspberry red, like those cases of piles which some delight to treat with nitric acid. Other means having failed, he directed the patient to mix a dessert-spoonful of liquor bismuthi with half a wine-glassful of starch, and after getting into bed and returning the bowel, to introduce the enema and retain it. A few weeks afterwards, Dr. C. remarks, “I have every reason to believe she has had no return of her malady.” The doctor has also used the same remedy for the ordinary prolapsus in children with invariable and rapid success. “When the mucous membrane is considerably involved,” continues Dr. C., “I know of no application to compare with injection of liquor bismuthi, which has the advantage of being painless; and, as in the case of prolapsus narrated above, the improvement of the mucous membrane has a wonderful influence on both the veins and integument.”

Gelseminum Sempervirens in Facial Neuralgia.—Dr. Spencer Thomson calls special attention (*Lancet*, Dec., 1875) to the value of tincture of gelseminum for the relief of neuralgic pain. According to his experience, the remedial power of gelseminum “seems confined to those branches of the trifacial nerve supplying the upper and lower jaws—more particularly the latter, and more especially when in either jaw the pain is most directly referred to the teeth or alveoli; indeed, he can scarcely recall an instance of the above in which relief was not speedily and thoroughly given.” Dr. Thomson now almost invariably prescribes for an adult twenty minims of the tincture as a first dose, to be repeated any time after an hour and a half, if relief is not given. He has rarely had to order a third dose in any of his 40 cases, and he has never found any inconvenience result from the dose. In one instance, a gentleman unadvisedly took thirty minims of the tincture at once, and immediately afterwards went out driving; he told Dr. T. that he experienced for an hour or two some uncertainty of vision when guiding his horse. A severe attack of neuralgia of the jaw was, however, cured by the one dose, and did not return. *Practitioner*, Jan., 1876.

Inversion of Body, and Metallic Mercury in Intussusception.—Dr. James Ross, of Toronto, reports (*Canadian Jour. Med. Sci.*, Jan., 1876) four cases of intussusception, two of which were treated by the usual methods, and died; the other two recovered after resorting to the novel expedient described in the first of the cases: a child, 18 months old, was suddenly attacked May 4,

1864, with vomiting and severe tenesmus, having been slightly troubled with diarrhoea for a week previous. The tenesmus was followed by a discharge of blood. Dr. R. saw the child May 6; the bowels had not been moved since the morning of the 4th. A distinct roll of invaginated bowel was felt immediately within the anus, and along the course of the sigmoid flexure, which was very tender under pressure. Vomiting, tenesmus, pain, prostration, and anxious countenance were the prominent symptoms. In consultation with Dr. H. H. Wright, the usual treatment was resorted to until the afternoon of the next day, when the patient was worse. Dr. Ross then inverted the patient, and injected five ounces of metallic mercury into the rectum. The patient was then shaken up and down for about ten minutes, the buttocks were inclined to the right, and the body gradually brought to a horizontal position on the right side, and then turned on the face—keeping up the shaking motion all the time, probably 20 minutes. The child manifested relief, and smiled. She was then gradually restored to the upright position by retracing the positions in which she had previously been placed, at the same time keeping the body constantly shaken. The mercury was detected by ballotement in the transverse colon. When in the erect position again, the quicksilver escaped into a basin. Recovery without impediment ensued.

The other case in which the same treatment was used was a child 18 months old. The intussusception was felt in the left iliac fossa, and the end of the invaginated portion was felt per rectum. Treatment about an hour in duration. Some of the mercury was retained 8 or 10 hours, but without bad symptom. No other opportunities have been offered Dr. Ross to repeat the treatment.

Nostrums, and their Composition.—We compile the following from the *Popular Health Almanac* for 1876:

Mrs. Winslow's Soothing Syrup consists of sugar syrup, strongly flavored with an alcoholic tincture of fennel, anise, and a little caraway seed, or an alcoholic solution of their essential oils, and with or without an admixture of solution of morphia sulphate in various quantity. While recently it has been found not always to contain morphia, at times as much as gr. ss and more has been found in each fʒj.

John Hill's Pectoral Balsam of Honey is a brown mixture or liquid, consisting of 9 parts, by weight, of balsam tolu, 2 of prepared balsam of storax, and 1 of opium, in 300 fluid parts of strong alcohol, sweetened with 80 parts of clarified honey.

Dalby's Carminative is a whitish, turbid liquid, in fʒiiss bot-

bles. It consists of $f\bar{3}\frac{1}{4}$ strong alcohol, gtt. j oil of anise seed, gtt. x. tinct. assafoetida, a few drops comp. tinct. cardaman, and gtt. x. laudanum; which mixture is added to a solution of grs. xj bicarb. potash, and $\bar{3}$ ss sugar in $f\bar{3}$ j peppermint water, or $f\bar{3}$. water intimately mixed with gr. j or ij of magnesia carb. and gtt. j oil of peppermint.

Godfrey's Cordial is a mixture of dilute alcohol, sweetened with molasses scented with oil of sassafras, and with an addition of a small amount of carbonate of potash, and about gtt. xv laudanum to each $f\bar{3}$ j (U. S. Dispen.).

Walker's California Vegetable Vinegar Bitters.—Each bottle of 19 or 20 fluid ounces contain a decoction of aloes, and a small quantity of gum guaiac, anise seed, and sassafras bark, in water slightly acidulated with acetic acid, or by subsequent fermentation, or by the addition of sour cider; add to this about $\bar{3}$ j soda sulphate, $\bar{3}\frac{1}{4}$ gum arabic and $f\bar{3}$ ss to $f\bar{3}$ j alcohol.

Brandreth's Pills.—The 24 pills in each box consist of gr. x $\bar{a}\bar{a}$ root of May apple and extract of same, gr. xxx ext. pokeberries, gr. x powdered cloves, gr. ij to iij of gamboge, traces of Spanish saffron, and a few drops of oil of peppermint.

Ayer's Cathartic Pills.—Each pill weighs nearly 4 grains, and consists of aloes, comp. ext. colocynth, gamboge, Spanish pepper and oil of peppermint.

Holloway's Pills, by weight, consist of aloes 40 parts, rhubarb 20, ginger 20, cinnamon 5, Spanish saffron 2, soda sulphate 5, potassa sulphate 10.

Hooper's Female Pills.—See U. S. Dispensatory.

Radway's Ready Relief—50-cent bottle: soap liniment $\bar{3}$ ij, alcoholic tinct. Spanish pepper $\bar{3}$ ij, hartshorn $\bar{3}$ ij.

Radway's Renovating Resolvent— $f\bar{3}$ vj vinous tinct. cardamon and ginger, sweetened with sugar.

Pierce's Golden Medical Discovery.—Ext. lettuce, $\bar{3}$ j; honey, $\bar{3}$ j; laudanum, $\bar{3}$ ss; dilute alcohol and water, $\bar{a}\bar{a}$ $\bar{3}$ ij.

Pierce's Favorite Prescription.—Sugar, $\bar{3}$ iv; gum arabic, $\bar{3}$ j, in half pint decoction made of savine, white agaric, cinchona bark, $\bar{a}\bar{a}$ $\bar{3}$ ij, cinnamon, $\bar{3}$ l $\frac{1}{4}$; to this mixture add laudanum, tinct. foxglove, $\bar{a}\bar{a}$ $\bar{3}$ ss, and a solution of oil anise seed, gtt. viij in alcohol $\bar{3}$ iss.

Sage's Catarrh Remedy.—Green powder $\bar{3}$ ss, which consists of finely-powdered common salt, gr. cc; powd. camphor, carbolic acid, $\bar{a}\bar{a}$ gr. viij to xij, colored with a mixture of finely-powdered Puccoon root, $\bar{2}$ j, with indigo, gr. ij.

Hamburg Tea consists of senna leaves $\bar{3}$ j, manna $\bar{3}$ ss, bruised coriander fruit $\bar{3}$ ij, powd. cream tartar $\bar{3}$ j,—in each $\bar{3}$ ij package.

Van Buskirk's Fragrant Sozodont is a red liquid consisting

of filtered solution of white castile soap $\bar{3}$ ss in strong alcohol, $\bar{3}$ j, water, f $\bar{3}$ vj, glycerin, $\bar{3}$ ij, colored with cochineal, and flavored with oils of peppermint, cloves and wintergreen. The powder accompanying each bottle is a mixture of precipitated chalk, powdered oris root and carbonate of magnesia.

The composition of *Warburg's Tincture*, which has great celebrity as an antipyretic remedy, has been made public in a paper of Prof. Maclean, of the Netley Medical School, in the *Medical Times and Gazette*, Nov. 13, 1875. The following is the formula: R Aloes (Socotr.), lbj, rad. rhei (E. India), sem. angelicæ, confect. fect. damocratis (which is a confection consisting of a variety of aromatic substances, was officinal, and is to be found in the London Pharmacopœia 1746) aa $\bar{3}$ ij; Rad. helenii (s. enulæ), croci sativi, sem. fœniculi, cret. preparat. (added to correct the otherwise extremely acid taste of the tincture), aa $\bar{3}$ ij; Rad. gentianæ, rad. zedoariæ, pip. cubeb., myrrh. elett. bolet. laricis (the polyporus laricis or officinalis, or larch agaric, which, says Pereira, was formerly "used as a drastic purgative, and still kept by the herbalist), aa $\bar{3}$ j. Digest the above ingredients in 500 oz. proof spirits in a water bath for 12 hours; then express and add quin. disulph., $\bar{3}$ x. Replace mixture in water bath till all quinine is dissolved. Filter the liquor when cool, and dispense.

Brown's Cholera Syrup.—Tinct. opium, 1 drachm; chloroform, 2 drachms; tinct. camphor, $\frac{1}{2}$ ounce; tinct. zanthoxylum, 1 ounce; tinct. cloves, 2 ounces; best French brandy, 4 ounces; syrup simple, 8 ounces. As soon as bowel complaint makes its appearance, take a teaspoonful of the syrup and go to bed.

Chlorodyne.—Chloroform, Squibb's, 2 fluid drachms; sulphuric ether, 1 fluid drachm; prussic acid, diluted U. S. P., 10 drops; tincture of capsicum, 30 minims; sulphate of morphia, 8 grains; powdered extract of licorice, 8 grains; oil of peppermint, 1 minim; molasses, 3 fluid drachms; distilled water, 30 minims. Mix. Dose, ten to fifteen minims, according to circumstances. Each thirteen minims contain about one-fourth of a grain of morphia.

Stoughton Bitters.—Gentian root, bruised, 4 ounces; orange-peel, bruised, 5 ounces; ginger, bruised, and cassia bark, of each, $\frac{1}{2}$ ounce; cardamom seeds, bruised, $\frac{1}{4}$ ounce; diluted alcohol, 1 gallon; syrup, 2 pints; water, 6 pints; cudbear, or tincture of the same, sufficient. Digest the drugs with the diluted alcohol for a week, then decant the clear liquor, press the residue, and pour on the six pints of water; again macerate for three days, press out the liquid, mix the two tinctures, color to taste, add the syrup, and filter.

Aconitia.—*The Journal of Nervous and Mental Disease*, January, 1876, says that Dr. Franceschini has made, in connection with M. Laborde, a series of experiments on animals with the nitrate of aconitia. Besides the depressive action on the general and local circulation, these experimenters have especially insisted upon the modification of the sensibility produced by this alkaloid, and they have arrived at the following conclusions:

1. Aconitia exercises an incontestable action on the phenomena of sensibility.

2. This action reveals itself in the physiological state by an enfeeblement, in various degrees, of the various kinds of sensibility which may, according to the dose, reach the point of the complete extinction of the sensitive functions of the nerves.

3. The first appreciable modifications of the sensibility under the influence of aconitine in hypodermic injection, seem to coincide with the first manifestation of the general symptoms.

4. In physiological doses, and even the very feeble ones of one, one-half, and one-fourth milligramme, the phenomena on the side of sensibility are already very manifest.

M. Franceschini has observed in the service of M. Gubler a number of cases of neuralgia which were treated with nitrate of aconitia. This salt, discovered by Duquesnel in 1871, was administered in granules containing each one-half a milligramme of the nitrate. For hypodermic injection, the following solution was employed:

R. Nitrate of aconitia..... 0 grm. 10.

Distilled water.....100 cc.

Dissolve and filter with care.

From one-half to one milligramme may be administered of this nitrate of aconitia.

According to the facts observed, this drug succeeds best in the congestive form of neuralgias (*Thesis de Paris* 1875, No. 369).—*Bull. Gen. de Therap.*, Oct. 15.

Induced Lactation.—Dr. Wm. J. Davis says (*Louisville Medical News*, March 25, 1876,) the interesting case of induced lactation reported by Dr. Gilbert in No. 11 of the *Louisville Medical News*, will recall other examples of unnatural nursing. Dr. Napheys, in his "Physical Life of Woman," mentions cases of the flowing of milk in aged women, in virgins, and even in men. Dr. Livingston says that in Africa he has seen old women suckling their grandchildren. Baudelocque tells of a young girl, aged eight years, who, by repeatedly holding to her breast an infant which her mother was suckling, gave enough milk to nourish the child several weeks during a time when her mother's health failed. Humboldt speaks of a man who suckled his child

for five months. Captain Franklin saw a similar case in the Arctic regions. Some years ago, in Baltimore, there lived a negro, fifty-five years old, who had acted as wet nurse to all the children of his master's family. There are instances, too, of prolonged nursing: The French traveller, Regnard, who journeyed through Lapland in 1681, says of the women of that country that they gave the breast to their children until the latter were five or six years old; and I have somewhere read of a woman who, as a wet nurse, gave milk continuously for twenty-seven years. But it seems that in all these cases the secretion was induced by a *desire* for its occurrence, as well as by suction from the nipples. It is a fact known to cattle-breeders that young heifers may be "induced" to give milk before calving, or even before carnally knowing a bull. My grandfather, who was an importer and breeder of thoroughbreds, used to select his milkers from heifers who had never taken the bull. High feeding and attempts to milk three times a day would soon bring a copious flow of milk, which would continue, year after year, as long as the cow lived. Of course, the cows had no *desire* to give milk; manipulation of the teats, together with good food, alone induced lactation.

Book Notices, &c.

Transactions of the Pathological Society of Philadelphia. Edited by JAMES TYSON, M. D., Hospital Professor of Pathological Anatomy, etc., University of Pennsylvania. Philadelphia, 1876. Pp. 258.

This handsome publication contains the Transactions of the Society for January, 1874—June, 1875, inclusive. The responsible duties of the Editor have been commendably performed. The reports of the comments made by members of the Society after descriptions of the pathological specimens add greatly to the value and interest of this volume as compared with former Transactions. We are glad to learn from the preface that hereafter the publications will occur annually.

It is impossible in a journal notice to review the teachings of such a mass of facts as are here presented. We were disappointed, however, in looking up some points regarding neural lesions, at the infrequency of thermometric observations given in the clinical reports. The statements of Bourneville and a few others are too important in a diagnostic point of view not to be confirmed or overthrown, as they may deserve. The trite af-

firmation that pathological specimens lose much of their value unless by their side are placed faithful records of all the known clinical facts connected with them, can scarcely be too often repeated. We make this remark in no spirit of criticism of this work, for in the main the reports are ample, but simply that we may keep constantly before the profession the necessity of making complete clinical observations—especially in every instance where there may be opportunities ahead for autopsies.

Dr. H. Lenox Hodge's Note Book for Cases of Ovarian Tumor and other Abdominal Enlargements supplies an important want for the clinical record of the class of cases indicated. Each book is intended for the complete record of a single case. For sale by Lindsay & Blakiston, publishers, &c., Philadelphia.

Transactions of the Texas State Medical Association. 7th Annual Session. Austin, April 6–9, 1875. H. W. BROWN, M. D., Waco, *President*; W. A. EAST, M. D., Hallettsville, *Secretary*.

The delay of this publication, the committee states, was due to circumstances beyond its control. The volume contains 223 pages; its appearance reflects credit upon the Publishing Committee, and the papers presented are valuable.

In passing our eye over the Proceedings proper, we find that much attention was given to the revision of Constitution, &c. We regret that the report on Indigenous Medical Resources, by Dr. S. O. Young, is not published. Each State should devote more attention to this subject. It is mentioned, however, that the *Tephrosia Virginiasis* is said to be a safe and certain remedy for the sting of the centipede and other venomous stings or bites; and the *Scutellaria Lateriaflora* is alluded to as a remedy for hydrophobia. Dr. T. J. Heard offers \$100 prize for the best essay on *Eucalyptus globulus*.

Human Progress—especially as applicable to medicine—was the subject of the address of the retiring President, Dr. A. G. Clopton, of Jefferson. Such addresses for the public as this do good. We are glad to see from the Proceedings that a large audience heard it.

The Report on the Science and Progress of Medicine, by Dr. D. R. Wallace, of Austin, was contributed to the May No., 1875, of the *Monthly*, and has therefore been read with interest by our subscribers.

From the report on *Climatology and Epidemics*, by Dr. John H. Pope, we learn that during the preceding year, "every part of the State was healthy."

Dr. R. H. Harrison, of Columbus, in his report on the *Epidemics of 1873 in Denoon, Calvert and Columbus*, concludes that the question as to the prevalence of yellow fever in these places is unsettled—unless there be varieties of the disease which would force us to “adopt the nomenclature of our distinguished and venerable confrere of Galveston [Prof. Greenville Dowell], and call it *Texas Yellow Fever*.”

Dr. T. J. Heard, Galveston, and Dr. E. P. M. Johnson each contributed papers on *Malarial Hæmaturia*, which are exceedingly interesting; but we have not the space to analyze them. They are, however, worthy of record, and should be thoroughly examined by every student of the subject.

Dr. O. H. Seeds reports two cases of *Tetanus* [*Successfully*] *Treated with Chloral*.

Dr. W. J. Burt reports a case of *Hydrophobia*—fatal, of course—though in four hours after the first dose of chloral the child became quiet and slept about half of the night, and continued almost free from convulsions until 9 o'clock of the following night, when she died without a struggle. No autopsy. It is of interest, however, in this connection to note that Offenburg, of Berlin, reports (*Deutsche Zeitsch. f. Prak. Med.*, No. 52, 1875, and copied in *Allegem. Med. Central. Zeitung*, Jan. 3, 1876,) having cured a woman, æt. 24 years, who was attacked with hydrophobia 80 days after being bitten by a mad dog. After morphine and chloroform had failed, he made seven hypodermic injections of woorara, of a little less than half a grain each time—three grains in all—in the course of $5\frac{1}{2}$ hours. Woorara paralytic symptoms followed, which were most marked the next day, but they gradually disappeared. On the following day, however, hydrophobic symptoms returning, gr. ss. woorara was again hypodermically used, and the patient slowly recovered, with some impairment of sight [probably wooraric?] at the end of two months.

Dr. B. C. Hadra reports five cases of *Trichiasis* occurring in one family; two of the cases proved fatal.

Drs. J. H. Sears and J. J. Burroughs each contributes a paper on *Psychological Medicine*. We are surprised that Dr. Burroughs should make so vulnerable a point as to state that “Psychology holds about the same relation to physiology that astrology does to astronomy!” Perhaps the Doctor will recognize his too hasty definition if he will simply ask himself, do we not sometimes find diseased brains without any implication of the *mind*, and do we not find disordered minds when there is no evidence of brain lesion? Mind is no more a *part* of the brain or nervous system than is blood a part of the heart—indeed, the analogy is not so marked.

Dr. Thomas D. Wooten, Paris, presents an excellent report on advances in *Surgery*. After paying his respects to inflammation, he takes up the water, cotton wool and antiseptic treatments of wounds, diseases of joints, club foot, stricture, aneurism, surgery of the rectum, torsion, bloodless operation, anæsthetics, aspiration, laryngoscopy, lithotomy, ovariectomy and gastrotomy. All our readers will recall the value of the Review of Therapeutics by Dr. Mary Putnam Jacobi, presented in our December and January numbers. This report by Dr. Wooten is of like interest.

Dr. M. A. Taylor's paper on *Esmarch's Method of Bloodless Operations* is confirmatory of the general estimate placed upon the operation.

The reports of cases in *Surgery* by Drs. J. Cummings and W. H. Park are interesting, but our want of space prevents a synopsis.

Dr. C. W. Trueheart reports a *Case of Skin Grafting and Transplantation of Skin for the Relief of Scars Following Burns*, etc.—Successful. The transplantation was from the mother and aunt of the body. The benefit of the method was also demonstrated by Dr. Trueheart in 64 experiments and observations while serving in the Franco-Prussian war.

Dr. Hillary Ryan details a case of *Carcinomatous Stricture of the Rectum*. Death, but no autopsy.

Dr. Greenville Dowell gives a paper on *Lithotomy*—substantially the same as presented in our columns last summer. He also follows up his paper in the Transactions of 1874 on *Radical Cure of Hernia* (published in our first volume) by another *Report on Hernia*, showing the advantages of his operation.

Dr. Hillary Ryan reports a case of *Lithotomy*, operation under such extraordinary circumstances that we will make a synopsis of it in the appropriate department of this issue. The nucleus of the stone was a *squirrel's tail*.

Dr. C. W. Trueheart describes a modification of obstetrical forceps, which he calls *The Conservative Forceps*, which, from the description, would seem to possess real merits. It is made by Messrs. John W. Reynders & Co., and Geo. Tiemann & Co., New York.

Dr. O. H. Seeds, in his paper on the *Therapeutic Use and Abuse of Gossypium Herbaceum*, concludes that it is an oxytocic and abortive, but is not aware of any emmenagogue virtues. He says it has specific action on the gravid uterus "only when given in a poisonous dose," and that its special effects are upon the renal and hypogastric plexuses.

The volume concludes with the able report of a committee

(Dr. R. H. Harrison, chairman), urging the establishment of a State Board of Health.

We find a record *in memoriam*: Dr. Benj. Baden Throop, born in Alexandria, Va., 1812; removed to Kentucky in 1833; thence to Texas in 1858; died at his home in Anderson, Texas, August 28, 1874.

Proceedings of the Medical Association of the State of Arkansas.
6th Session. Little Rock, Nov. 1-3, 1875. WM. H. BARRY, M. D., Hot Springs, *President*; JAS. H. SOUTHALL, M. D., Little Rock, *Secretary*.

We heartily endorse the closing sentence of the President's address: "Forlorn as the hope appears to be, I trust yet to see the medical profession of Arkansas reconciled, that discord may give way to harmony, that we may again work zealously together for the accomplishment of the same noble purposes; that the ship of science, now so rudely tossed by angry waves of professional strife, may soon be safely anchored in placid waters of peace."

The first of the scientific communications is by Dr. E. T. Easley, Little Rock, on *Digitalis in the Weak Heart of Continued Fever*, and is an exceedingly valuable contribution. The whole gist of the paper, interesting in all of its details, is summed up in the sentence: "If called upon to say what remedy, in my hands, has afforded most marked relief in the latter stages of continued fever, I should reply at once, digitalis." Suit the dose to the case. Dr. E. has given as high as 3j of the official tincture every three hours for days together, and with such favorable results as he has never derived from other remedies.

Dr. J. A. Dibblell, Little Rock, has a paper on *Is Ergot an Oxytocic?* His observations go to show that ergot, administered in cases of threatened abortion, does produce a *form* of contraction of the parturient womb, but not of the same character as those contractions witnessed in normal cases of parturition. So long as the ergot continues to act when so given, the uterus is in a state of tonic or spastic contraction, whereas in labor, the contractions are clonic. Hence, ergot often fails to aid efforts at abortion. "Indeed * * * it cannot act otherwise than injuriously in a large number of cases." Nothing said by the writer is intended to detract from the well-earned reputation that ergot has for the purpose of arresting uterine hæmorrhages, expelling polypi, preventing the growth and causing the disappearance of intramural fibroids, etc. Yet, whatever may be isolated observations of a few clinicians, it

cannot be denied that ergot still is an oxytocic—that in the vast majority of cases it does expedite delivery. So general is this experience as compared with the opposite, that it is more reasonable to inquire into the causes of failure in the exceptions than to deny its oxytocic action. One of the great troubles—at least the one most frequently observed—is that ergot is not given in sufficient doses. We have now in hand a case in which chloral in ordinary doses, instead of quieting the patient to sleep, only throws her into a state of excitement; others have observed like occasional effects. But should we deny, from these isolated or exceptional facts, that chloral is a sleep producing agent?

Dr. G. H. Smith, of Hot Springs, reports a *Case of Uterine Fibroids* in a colored woman, with autopsy, showing extensive adhesions to the intestines.

Dr. E. Cross, Little Rock, reports a case of *Abscess of the Spleen, with Treatment—Recovery*. While preparing the patient for operation, the integuments gave way, and a half gallon of thin, offensive pus was discharged. Injections were made every third day of iodine ʒss carbolic acid, gr. v, water ʒss, which were followed by no pain or uneasiness. At the end of about four months the patient was well.

Dr. Jacob Deutsch, Little Rock, reports a *Case of Purpura Hæmorrhagica*, during the course of which the “whole body and face were, at the same time, covered with red, green and yellow spots, and with round, black, gangrenous scurfs”—the gangrenous wounds in some places being of the size of a silver dollar. After all this, the lad recovered on treatment by nourishing diet, ferruginous tonics and astringents.

Dr. J. H. Southall, of Little Rock, has a paper also on *Ergot as an Oxytocic*. He expresses himself in the statement that during a practice of 14 years, he has never given ergot as an oxytocic, but that its specific effect in this respect was manifest. All these discussions of late about the oxytocic property of ergot have brought out facts which more than ever confirm the experience long ago clinically established. Nothing that has been said has impaired our confidence in the oxytocic properties of the agent, derived from clinical observation.

A Treatise on Surgery; Its Principles and Practice. By T. HOLMES, M. A., Cantab., Surgeon to St. George's Hospital. With 411 illustrations. Philadelphia: Henry C. Lea, 1876. Pp. 960. Price \$7. (For sale by West, Johnston & Co., Richmond).

The reputation of Mr. Holmes as a surgical author has be-

come world wide since the publication of his *System of Surgery* a few years ago—to which elaborate work, indeed (the Preface informs us), this volume is intended to be to some extent introductory.

From the examination which we have given the treatise before us, we are satisfied that it will prove useful to those who have not his larger volumes. Theoretical discussions and detailed historical accounts are, in the main, omitted, in order to give more space to facts of practical interest. Chapters on surgical diseases of the eye, ear and skin are added, so as to make the work complete as a manual or text book.

This work is an exposition especially of British surgery. It is unfortunate that the author should claim in his preface that he has also referred, as far as his information and space allowed, to the works of American surgeons; for it seems, after an examination of the text, that he must be almost wholly unacquainted with them. Inventive or mechanical skill, indeed, is an essential element of surgical success which Americans possess in an eminent degree; and we are scarcely going too far in claiming for them, as a whole, that they are better practical operative surgeons than their English brethren. This is but a natural result of the differences in the modes of practice in the two countries. In America every medical practitioner is more or less of a surgeon from the necessities of the case, which oftentimes calls for the exercise of all the inventive genius that the practitioner possesses; in England surgery is almost entirely in the hands of comparatively a few, who, in the possession of all the instruments and means recommended, are less frequently called upon to modify established operations, or to make any special exercise of inventive skill.

On glancing over the chapter on Inflammation, we find that the author expresses his "strong conviction of the value" of Lister's antiseptic method. He has "frequently ascertained by thermometric and other observations, and pointed out to others, the perfect immunity from traumatic fever, which, in some cases, follows even the gravest injuries or operations thus treated." He does not think this method of treating traumatic inflammations will ever be superceded by the more recent suggestion of Prof. Lister (lint saturated with boracic acid), or by the salicylic acid dressing, which he has tried.

In the chapter on Erysipelas, we find no allusion to the use of quinia for its treatment. Had our author have examined American literature a little more carefully on this subject, he would at least have mentioned quinia among the agents, along with muriated tincture of iron, which have a reputed special therapeutic value in erysipelas.

On the subject of Fractures and Dislocations, Mr. Holmes does not lead one to suppose that he has ever seen the great work of Dr. Frank H. Hamilton, of this country. This is unfortunate, for had he consulted this treatise by our distinguished countryman, he would have been enabled to offer, in many instances, better suggestions, regarding the treatment of fractures particularly, than some of those he recommends. We also look in vain for any light on the important though vexed question regarding shortening of long bones after fracture.

In the chapters on club foot, and coxalgia, and ovariectomy and others, we do not think that sufficient prominence has been given to results of American surgery, in view of the remark in the preface, to which attention has been called.

In conclusion, we would say that we have referred rather to the faults than to the excellences of the work. It is a work that surgeons generally can ill afford to do without—especially if they have not the *System of Surgery* edited by Mr. Holmes. It may be considered as an exposition of Continental, and especially of English surgery; and as a condensation of all the more important papers contained in the four larger volumes published some years ago. But should a second American edition be called for, it should have an American editor, in order that it may contain a fair exposition of American surgery. An edition thus revised would make this an excellent text book for students and general practitioners.

The Body and its Ailments. A Handbook of Familiar Directions for Care and Medical Aid in the more usual Complaints and Injuries of Adults and Children. To which is added a Family Health Record. Edited from the Works of Drs. South, Turner and others, with an Introduction, by GEORGE H. NAPHEYS, A. M., M. D., Member of the Philadelphia County Medical Society, etc. Illustrated by over 100 Engravings and Colored Plates. Philadelphia: H. C. Watts & Co., 1876, 12 mo.; pages 438. (From the Publishers).

The character of this book is explained in the title. It gives directions to families as to what to do "Till the Doctor comes." We have all along urged the better education of the people in medical matters. This book imparts a good deal of useful information, as does all of the series edited by Dr. Napheys, and we therefore recommend it. It has as few errors as any work of its class that we have ever seen.

We regret that our space does not allow us to do more than to mention the titles of other publications received:

Transactions of the 42d annual session of the Tennessee Medical Society. Held at Nashville, April, 1875. Pp. 156. Dr. J. H. Van Deman, Chattanooga, President; Dr. J. D. Plunket, Nashville, Secretary.

Transactions of the Mississippi State Medical Association. Seventh annual session. Held at Columbus, April 1-3, 1874. With the Constitution and By Laws. Pp. 118. Dr. P. F. Whitehead, Vicksburg, President; Dr. R. Anderson New, Port Gibson, Secretary.

Proceedings of the Mississippi State Medical Association. Eighth annual session. Held at Vicksburg, April 7-9, 1875. Pp. 32. Dr. M. S. Craft, Jackson, President; Dr. R. A. New, Port Gibson, Secretary.

Transactions of the Medical Society of the District of Columbia. Jan. 1876. Washington, D. C.

American Association for the Cure of Inebriates. Proceedings of the sixth meeting, held at Hartford, Conn., September 28, 1875. Pp. 98. Dr. T. L. Mason, Brooklyn, President; Dr. T. D. Crothers, Albany, N. Y., Secretary.

Transactions of the Medical Society of the County of Erie [N. Y.] 55th annual meeting, held at Buffalo, Jan. 11, 1876. Pp. 32. Dr. D. W. Harrington [Buffalo, N. Y.], Secretary.

Climate and Diseases of America during the Revolution. By Dr. Johann David Schoepff, Surgeon of the Anspach-Bayreuth Troops in America. Translated by J. R. Chadwick, M. A., M. D. Boston: H. O. Houghton & Co., 1875. Pp. 31. For sale by West, Johnston & Co., Richmond. Price, 30 cents.

Uronology and its Practical Applications. (Réprint.) Pp. 107. By Geo. M. Kober, M. D., Washington, D. C.

Catarrhal Affections of the Eye, Nose and Ear. By Martin F. Coomes, M. D., Louisville, Ky.

Rare form of Idiopathic or Localized or Partial Atrophy of the Skin. (Reprint.) By R. W. Taylor, M. D., New York, N. Y.

Dangers of Transmission of Syphilis between Nursing Children and Nurses in Infant Asylums and in Private Practice. (Reprint.) By same author.

A Contribution to the Study of Syphilis of the Nervous System. (Reprint.) By same author.

Valedictory Address by Clark Bell, Esq., on retiring from the Presidency of the (N. Y.) Medico-Legal Society.

Pigmentary Deposits in the Brain, resulting from Malarial Poisoning. (Reprint.) By Wm. A. Hammond, M. D., New York.

On the Cause of Vice President Wilson's Death. (Reprint.) By same author.

Best Welfare of Invalids Seeking the Benefits of Climate, with suggestions for the Co-operation of Physicians, Life Insurance Officials, &c. By Charles Denison, M. D., of Denver, Colorado. Is an exceedingly suggestive paper, for which the author deserves great credit.

Hermaphroditism from a Medico-Legal Point of View. By Basile Poppesco, translated by Dr. Edw. Warren Sawyer, Lecturer in Rush Medical College. From W. B. Keen, Cooke & Co., Chicago. Price 50 cents. Pp. 45.

Treatment of Syphilis, with remarks on the Degree of Inheritance. (Reprint.) By Joseph W. Thompson, M. D., Paducah, Ky.

Diseases of Minnesota and the Northwest. (Reprint.) By D. W. Hand, M. D.

Clinical Contribution to Ophthalmology, from the Practice of Dr. C. R. Agnew. (Reprint.) By Dr. D. Webster.

Climate in its Sanitary Relations to Medicine. By A. S. Baldwin, Jackson, Fla.

On the Administration of Digitalis in the Weak Heart of Continued Fever. (Reprint.) By E. T. Easley, A. M., M. D., Secty. of the Surgical Section of the American Medical Association, etc., Little Rock, Ark.

Immobility or Closure of the Jaw, with Report of Cases. (Reprint.) By W. F. Westmoreland, M. D., Prof. Surgery Atlanta Medical College.

Effect of Small Doses of Mercury in modifying the number of the Red Blood Corpuscles in Syphilis; a Study of Blood Counting with the Hématimètre. (Reprint.) By E. L. Keyes, M. D., New York.

Aphonia; Its Causes and Treatment. (Reprint.) By Wm. Porter, M. D.

Are Carbolic Acid Disinfections Useful in Yellow Fever? (Reprint.) By Y. R. Le Monnier, New Orleans.

Medico-Legal Evidence of Independent Life in a New Born Child. (Reprint.) By J. B. Gaston, M. D., Montgomery, Ala.

Reports of 16 Cases of Cataract Operation. (Reprint.) By B. Joy Jeffries, M. D., Boston, Mass.

Observations upon two Cases of Fibroma Molluscum. (Reprint.) By J. E. Atkinson, M. D., Baltimore.

Treatment of Venereal Diseases by Salicylic Acid, with 8 Illustrative Cases. (Reprint.) By Geo. Halsted Boyland, M. D., Baltimore.

Treatment of the Scrofulides. (Reprint.) By Henry G. Piffard, A. M., M. D.

Suppurative Otitis Media. (Reprint.) By A. Blitz, M. D., Nashville, Tenn.

Urethroplastic Operations to remedy Hypospadias, Epispadias, and also Incurvation of the Penis. (Reprint.) By J. W. S. Gouley, M. D., Surg. to Bellevue Hospital.

Mania a Potu. (Reprint.) By L. A. Dugas, M. D., Augusta.

Mammitis and Mammary Abscesses treated by Bandaging. Reprint by same author.

Curability of Inflammation. Reprint by same author.

Biographical Sketch of John D. Jackson, M. D., of Danville, Ky.

(Reprint.) By Drs. J. M. Toner, of Washington, D. C., and L. S. McMurtry, M. D., of Danville, Ky.

A statement of the Relations of the Faculty of Medicine and Surgery in the University of Michigan to Homœopathy.

Fourth Annual Report of State Board of Health of Minnesota.

Dr. Chas. N. Hewitt, Red Wing, Secty.

Report of Directors and Physician of Western (Va.) Lunatic Asylum, 1875. Dr. Robert F. Baldwin, Physician and Superintendent, Staunton, Va.

Fifth Annual Report of Board of Directors of Children's Hospital, D. C.

Annual Report of Surgeon General U. S. Army, 1875.

Second Annual Report of City Physician of Knoxville, Tenn., Dr. A. B. Tadlock.

Report of the Managers and Superintendent of the [Texas] State Lunatic Asylum, 1875, Dr. D. R. Wallace, Superintendent, Austin.

Annual Report of the Baltimore Eye and Ear Institute. Julian J. Chisolm, Surgeon in Charge.

Editorial.

The Third Annual Volume of the Monthly begins with this issue, and under circumstances of increased encouragement to the Editor. At the end of two years, the journal has established a circulation reaching from the Atlantic to the Pacific, and from the extreme North to the furthest Southern section of the country. This success has been achieved, too, during a period of the severest financial depression which has oppressed the nation for many years. It only remains for the Editor to state that none of his efforts to still further improve the journal will be lessened during the coming year.

Subscribers whose payments have expired, and who propose continuing the journal, are earnestly requested to send in the amounts due at once. The Proprietor has no other way of knowing who are to be the subscribers; and as he has no desire to force the journal into unwilling hands, he will be compelled to drop from the mailing book the names of delinquents who do not respond to this note.

The *Monthly* has no subscription agents; but it is hoped friends everywhere will induce their neighbors to subscribe. Should a soliciting agent as such be sent out, he will be armed with an autograph letter from the editor written upon the letter head paper of the *Monthly*. A scoundrel, going by the name of Lockwood, we hear, has imposed upon certain communities.

Medical College of Virginia.—The commencement exercises of this College transpired March 1st, and was a brilliant occasion. The address by Rev. Dr. M. D. Hoge, of this city, was a happy effort. The degree of *Doctor of Medicine* was conferred by the Dean on the following gentlemen: E. N. Booker, J. W. Bryant, Jr., Robert Cowen, R. G. Crouch, Wm. Crutchfield, W. H. Edmondson, J. W. Ford, A. Spiers George, L. P. James, P. S. Jeter, G. P. Lumsden, J. H. McCaw, J. Michaux, W. A. Newman, G. Rawles, H. M. Taylor and E. Wynn—17. In addition, Messrs. W. S. Nelson and R. T. Styll graduated in *Pharmacy*. Dr. A. Spiers George was awarded the medal for the best essay on the prize subject, *Electro-Therapeutics*. The subject for the next prize essay to be awarded by the Faculty is *The Pathology and Treatment of Spinal Deformities*.

In evidence of the high standard of graduation in this College, it may be stated that of the several graduates of last year who applied for admission into the U. S. Army and Navy, all of them passed the rigid examinations required by the respective Boards. Many applicants who graduated at other Colleges were defeated. In addition to the regular courses of didactic and clinical lectures by the winter and summer Faculties of the Virginia College, the system of daily examinations of each student by the Adjunct Faculty drills the student thoroughly in the subjects of study.

The Number of Graduates in Medicine during 1876, thus

far reported, are: Medical College of Virginia, 17; Rush Medical College, 77; Medical Department of the University of the City of New York, 133; Bellevue Hospital Medical College, 159; Louisville Medical College, 92; Washington University School of Medicine, 32; College of Physicians and Surgeons, 93; Medical Department of University of Pennsylvania, 124; University of Louisville, 112; Medical College of Ohio, 90; Jefferson Medical College, 141; Evansville (Ind.) Medical College, 8; Medical Department Vanderbilt University, 63; Medical College of the Pacific (commencement, Nov., 1875), 11; Medical Department of the University of California (commencement, Nov., 1875), 13; Atlanta Medical College, about, 30; Woman's Medical College (of Philadelphia), 12 ladies; Missouri Medical College, 72; St. Louis Medical College, 47—Total, 1,314 male graduates; 12 female.

Our Exchanges should know that B. Alexander & Co., of New York, have not paid their advertisement bill with us, and do not reply to any of our letters. The publication of such unprincipled conduct may save others from a loss similar to that we have sustained. Other journals inform us that the firm named has also acted dishonestly with them.

The International Medical Congress will be formally opened at noon, on Monday, September 4th, 1876, in the University of Pennsylvania, Philadelphia. We have already (May No. 1875, pages 148-9) published the list of addresses to be delivered in the general meeting. We regret, however, to find omitted from the revised programme just received, the names of Dr. Levin S. Joynes, of Richmond, who was appointed to make a report on Physiology, and of Dr. Alfred Stillé, of Philadelphia, who was appointed to report on Materia Medica and Therapeutics. Nor do we find that their places have been supplied. The first named gentleman, we regret to say, has declined to act, and we suppose the same is true of the other. In addition to the reporters appointed last May, we find on the present programme the name of Dr. Hermann Lebert, of the University of Breslau, but his subject is not announced.

Discussions will be opened in the sections as follows:

SECTION ON MEDICINE.—*Typho-Malarial Fever: Is it a Spe-*

cial Type of Fever? Dr. J. J. Woodward, U. S. A., Reporter. *Are Diphtheria and Pseudo-Membranous Croup Identical or Distinct Affections?* Dr. J. Lewis Smith, N. Y., Reporter. *Do the Conditions of Modern Life favor specially the Development of Nervous Diseases?* Dr. Roberts Bartholow, Cincinnati, Reporter. *Influence of High Altitudes on the Progress of Phthisis.* Dr. Charles Denison, Denver, Colorado, Reporter.

SECTION ON BIOLOGY.—*Microscopy of the Blood*, Dr. Christopher Johnston, Baltimore, Reporter. *Excretory Functions of the Liver*, Dr. Austin Flint, Jr., New York, Reporter. *Pathological Histology of Cancer.* Dr. J. W. S. Arnold, N. Y., Reporter. *The Mechanism of Joints*, Dr. Harrison Allen, Philadelphia, Reporter.

SECTION ON SURGERY.—*Antiseptic Surgery*, Dr. John T. Hodgen, St. Louis, Reporter. *Medical and Surgical Treatment of Aneurism*, Dr. W. H. Van Buren, N. Y., Reporter. *Treatment of Coxalgia*, Dr. Lewis A. Sayre, N. Y., Reporter. *Causes and Geographical Distribution of Calculous Diseases*, Dr. Claudius H. Mastin, Mobile, Ala., Reporter.

SECTION ON DERMATOLOGY AND SYPHILOLOGY.—*Variations in Type and in Prevalence of Diseases of the Skin in different Countries of equal Civilization*, Dr. James C. White, Boston, Reporter. *Are Eczema and Psoriasis local Diseases, or are they Manifestations of Constitutional Disorders?* Dr. L. Duncan Bulkley, N. Y., Reporter. *The Virus of Venereal Sores: Its Unity or Duality*, Dr. F. J. Bumstead, N. Y., Reporter. *The Treatment of Syphilis, with special reference to the Constitutional Remedies Appropriate to its Various Stages, the Duration of their use, and the Question of their Continuous or Intermittent Employment*, Dr. E. L. Keyes, N. Y., Reporter.

SECTION ON OBSTETRICS.—*Causes and Treatment of non-puerperal Hæmorrhages of the Womb*, Wm. H. Byford, Chicago, Reporter. *Mechanism of natural and artificial Labor in Narrow Pelves*, Dr. Wm. Goodell, Reporter. *Treatment of Fibroid Tumors of the Uterus*, Dr. Washington L. Atlee, Philadelphia, Reporter. *Nature, Causes and Prevention of Puerperal Fever*, Dr. Wm. T. Tusk, N. Y., Reporter.

SECTION ON OPHTHALMOLOGY.—*Comparative Value of Caustics and Astringents in the Treatment of Diseases of the Conjunctiva, and the best mode of Applying them*, Dr. Henry W. Williams, Boston, Reporter. *Tumors of the Optic Nerve*, Dr. Herman Knapp, N. Y., Reporter. *Orbital Aneurismal Disease and Pulsating Exophthalmia; Their Diagnosis and Treatment*, Dr. E. Williams, Cincinnati, Reporter. *Are Progressive Myopia and Posterior Staphyloma due to Hereditary Predisposition, or can*

they be induced by Defects of Refraction, acting through the Influence of the Ciliary Muscle? Dr. E. G. Loring, N. Y., Reporter.

SECTION ON OTOTOLOGY.—*Importance of Treatment of Aural Diseases in their Early Stages, especially when arising from the Exanthemata*, Dr. Albert H. Buck, N. Y., Reporter. *What is the best mode of Uniform Measurement?* Dr. Clarence J. Blake, Boston, Reporter. *In What Percentage of Cases do Artificial Drum-Membranes prove of Practical Advantage?* Dr. H. N. Spencer, St. Louis, Reporter.

SECTION ON SANITARY SCIENCE.—*Disposal and Utilization of Sewage and Refuse*, Dr. John H. Rauch, Ill., Reporter. *Hospital Construction and Ventilation*, Dr. Stephen Smith, N. Y., Reporter. *General Subject of Quarantine with Particular Reference to Cholera and Yellow Fever*, Dr. J. M. Woodworth, U. S. Marine Hospital Service, Reporter. *Present Condition of the Evidence Concerning "Disease-Germs,"* Dr. Thomas E. Satterthwaite, N. Y., Reporter.

SECTION ON MENTAL DISEASE.—*Microscopical Study of the Brain*, Dr. Walter H. Kempster, Oshkosh, Wis., Reporter. *Responsibility of the Insane for Criminal Acts*, Dr. Isaac Ray, Philadelphia, Reporter. *Simulation of Insanity by the Insane*, Dr. C. H. Hughes, St. Louis, Reporter. *The Best Provision for the Chronic Insane*, Dr. C. H. Nichols, Washington, D. C., Reporter.

Gentlemen intending to make communications upon scientific subjects, or to participate in any of the debates are requested to notify the Commission before the first of August, in order that places may be assigned them on the programme.

In order to facilitate debate, those who propose to read essays or to enter the discussions in any of the Sections are urgently requested to forward the heads of their essays or the outline of their opening remarks to the Committee of Arrangements by May 20th, in order that they may be published about June 1st. Copies may then be obtained on application to the Corresponding Secretaries. Each party is also requested to sum up, at the close of his paper, the views embodied in it, by such conclusions or propositions as can be voted upon separately in the Section, and afterwards reported to the Congress. The time allotted to the reading of a paper before the Section is limited to thirty minutes.

The registration fee (not, however, required of foreign members) will be \$10., which will entitle the member to the public dinner, on September 7th, at 7.30 P. M., and also to a copy of the Transactions of the Congress, which will be published as soon as practicable after the adjournment.

On looking over the list of 35 Reporters above named, we are struck with the fact that only 2 are from the Southern States—1 from Baltimore and the other from Mobile—though the South has a medical population of one-fifth of all the *regular* physicians in the United States. We know not how the 35 Reporters named have been appointed; but whether due to want of acquaintance on the part of the Executive or Appointing Committee at Philadelphia with the many qualified Southern physicians, who are as capable as any on the published list to make valuable and creditable reports on important subjects, or whether due to the apathy, neglect or diffidence of Southern practitioners to announce themselves, the effect upon the South is still the same. There are, indeed, at this very moment, special questions of national medical importance, and of the intensest interest, too, that ought to call for special investigations and reports, and which cannot be so intelligently recorded as by Southerners. Such, for instance, are the subjects of hæmorrhagic malarial fever, the medical questions regarding the negroes in their freed condition, etc.

We hope that the medical men of the South will awake from their apathy, if such exists, and will at once go to work to place themselves upon record in a manner creditable to themselves and their section, as they can do if they will only resolve and labor to do so.

Animal Vaccine Virus.—Dr. W. T. Jones, of Baltimore, will continue to propagate and supply pure animal vaccine virus to the profession and trade after the expiration of his term of office in May as (Maryland) State Vaccine Agent. He has formed a connection with the proprietor of the largest vaccine farm in this country, and will be able at any time to send virus, in large or small quantity, to the Southern States especially—the field of his future operations. Dr. Jones promises to superintend in person the propagation of all the animal virus that he may send out. In view of his many years experience in the business, the high reputation which his virus has secured already, it is not too much to say that the profession may rely upon always securing a pure and reliable article in sending their orders to him. The use of animal vaccine virus, as every one knows,

is rapidly superseding the use of human virus. We hope that Dr. Jones may receive the liberal support of his professional brethren.

The Notice of the "Southern Historical Papers," which was prepared for our last issue, was accidentally overlooked by the printer. These "Papers," edited by Rev. J. Wm. Jones, D.D., in Richmond, are published monthly at \$3 a year, though it is sent free to members of the Southern Historical Society who have paid their dues. This publication will be of as much interest to physicians as to other people; besides, important records of the Medical Department of the Confederate States will from time to time appear in it. Most important papers in reference to Andersonville, Ga., and other Southern Prisons, are now in course of publication from the pens of Dr. Stevenson, of Worsham, Va., who was the Surgeon in Charge of Andersonville, and Prof. Joseph Jones, M. D., of New Orleans, who made official inspections of the Prisons. It is in the interest of national peace that we suggest the reading of these and other like papers, North and South.

That Homœopathic Petition, to which we alluded in our last issue, was placed on the desk of each Delegate in the Virginia Assembly a few days before adjournment of that body. It came near throwing the Delegates into *convulsions*—of laughter. It is wonderful with what potency a homœopathic granule can act. A non-professional gentleman, after reading it, remarked "it was enough to make a dog strike his father." But then the *powerful* effect of this petition aptly illustrates one of the fundamental principles upon which the practice of homœopathy is based—the doctrine of *mental impressions*. The mental impression made by homœopathy is, however, not always of the kind desired. In the matter before us, for instance, a non-professional delegate, who had not made up his mind as to how he would vote, stated that since he had read the "petition," he was going to vote for the bill requiring medical examinations of those who propose to practice medicine in Virginia.

The Medical Examiners' Board Bill was not reached in the regular order of business before the General Assembly of Virginia adjourned. It, therefore, lies over until the next session

as unfinished business. The passage of the bill was unanimously recommended by the Committee on Propositions and Grievances. The active interest taken by Drs. R. H. Cox, Dunn, W. S. Morris and others in the House of Delegates, entitles these gentlemen to the thanks of the profession, and particularly of the people they specially represent.

The Ohio Medical and Surgical Journal is the title of a new 48-pagemothly to be published in Columbus—Drs. J. W. Hamilton and J. F. Baldwin, editors. Price \$2 a year. The prospectus does not state when the first number will appear, but announces that the *Journal* will be “of special interest and value to the physicians of Central and Northern Ohio.” Unlike some of our exchanges North of us, we commend all such enterprizes as have for their object the dissemination of medical literature.

Increase of License Tax.—The Virginia Legislature has recently enacted that the specific license tax on every physician, surgeon or dentist, who has been licensed for less than five years, is to be ten dollars, and on every physician, surgeon or dentist, who has been licensed and practiced for five years and more, shall be fifteen dollars.

As the city or county license tax of \$10 is to be added to the above State tax, it will be seen that it is getting to be an expensive luxury in Virginia to try to do good in a medical way.

Uniformity of Standard Measures, Instruments and Methods of Observation.—All who are familiar with the labors of Dr. Edward Seguin, of New York, for securing such an International Uniformity, must appreciate their importance, and will recognize the benefit to be derived from the measure should his efforts prove successful. The measure has been generally approved, it may be said, in France, England and America, whenever brought to the attention of the scientific bodies; and “it is now proposed to submit the same question to the next International Medical Congress—to ask the Congress to constitute National Commissions similar to the French one, which has volunteered its services in Paris; to appoint the next meeting of the International Medical Association as the place where these Commissions will present a joint report on the most practical means of *uniformising* the methods, instruments and records of observa-

tion; to consider the feasibility of this plan in connection to—but not by confounding it with—the adoption of the French Metric System; to entrust all the executive measures demanded for the realization of this plan to Dr. W. B. Atkinson, the General Secretary of both the American and the International Associations.”

The subject is of great interest just now when there appears to be somewhat of a transitional period regarding weights, measures, &c. In this day of general reading of foreign journals, &c., there is often great confusion in the mind of the student as to the exact weights, measures, &c.—since almost every nation uses tables of their own which differ from those of their neighbors. We heartily endorse Dr. Seguin’s move.

Dr. Paul F. Eve requests that any contributions to surgery made by an American be forwarded to his address (Nashville, Tennessee) by July 4th, 1876. They are designed to be reported at the Centennial by the representative of that department of medicine.

Wanted.—Copies of November No., 1874, and April, 1875. Liberal payments will be made.

Mortuary Report

OF SOUTHERN CITIES FOR FEBRUARY, 1876.

ABBREVIATIONS.—*A.* for acute; *c.* for colored; *chr.* for chronic; *est.* for estimated; *f.* for female; *H. O.* for Health Officer or Registrar; *m.* for male; *ppn.* for population; *w.* for white; *yr.* for year or years.

Richmond, Va., H. O., Dr. J. G. Cabell. Ppn. est., 35,000 w., 30,000 c. Deaths, 24 w. m., 18 w. f.; 36 c. m., 25 c. f.; also stillborn, 6 w., 10 c. Ages: Under 1 yr., 5 w., 16 c.; under 3 yr., 1 w., 6 c.; under 10, 3 w., 3 c.; under 20, 1 w., 4 c.; under 30, 4 w., 6 c.; under 40, 3 w., 7 c.; under 50, 7 w., 6c.; under 60, 5 w., 6 c.; under 70, 8 w., 5 c.; under 80, 2 w., 1 c.; under 90, 3 w., 1 c. Causes of death: Accidents, 2 w., 3c.; apoplexy, 3 w., 3c.; ascites, 1 c.; asthma, 1 c.; birth, premature, 1 w.; brain congestion, 3 c.; brain softening, 1 w., 2 c.; bronchitis, act., 1 c.; cholera morbus, 1c.; consumption, 2 w., 12 c.; convulsions, 3 ; convulsions, puerperal, 2 c.; croup, 1 c.; debility, inanition, &c., 2 w., 3 c.; diarrhoea, 1 w.; dropsy, 1 w.; dysentery, act., 1 w.—chr., 1 w.; enteritis, 1 c.; fever, typhoid, 2 w., 1 c.; gastritis, 1 c.; hæmorrhage, post partum, 1 w.; heart

hypertrophy, 1 w.; hernia, umbilical, 1 w.; hydrocephalus, 1 c.; infanticide, 1 w., 2 c.; liver, abscess, 1 w.; —, inflamed, 1 w.; lungs, congestion, 1 w., 3 c.; meningitis, 1 w.; —, spinal, 1 c.; paralysis, general, 1.; pneumonia, 5 w., 6 c.; scrofula, 1 w.; syphilis, 1 w.; trismus nascentium, 1 c.; unknown or ill-defined, 7 w., 8 c.; uræmia, 1 w.; worms, 1 c.

PETERSBURG, VA.—*H. O.*, Dr. J. Herbert Claiborne. *Ppn.*, 1873, census, 8,744 w., 10,185 c. *Deaths*, 5 w. m., 7 w. f.; 9 c. m., 11 c. f.; also *stillborn*, 1 w., 5 c. *Ages*: Under 1 yr., 5; under 5, 3; under 10, 3; under 20, 1; under 30, 5; under 40, 2; under 50, 2; under 60, 2; under 70, 4; under 80, 5. *Causes of Death*: Apoplexy, 1 c.; burn, 1 c.; consumption, 3 w., 3 c.; developmental, 2 c.; diarrhoea, chr., 1c.; dropsy, 1 w., 1 c.; gastralgia, 1 c.; heart valvular disease, 1 w.; pneumonia, 5 w., 2 c.; scarlatina, 1 w.; unknown, 1 w., 6 c.; worms, 1c.

LYNCHBURG, VA.—*H. O.*, Dr. Wm. H. Dulaney. *Ppn est.*, 7,000 w., 7,000 c. *Deaths*, 7 w. m., 4 w. f.; 10 c. m., 8 c. f.; also *stillborn*, 7 c. *Ages*: Under 1 yr., 4 c.; under 3 yr., 1 w., 3c.; under 10, 2 c.; under 20, 1 w., 2 c.; under 30, 2 w., 1 c.; under 40, 1 c.; under 50, 4 w.; under 60, 4 c.; under 70, 1 w.; under 80, 2 w. *Causes of Death*: Apoplexy, 1 c.; brain disease, 1 w., 1 c.; bronchitis, 1 c.; consumption, 2 w., 6 c.; diarrhoea, 1 w.; heart disease, 3 w., 1 c.; tubercular meningitis, 1 c.; old age, 1 w.; paralysis, 1 w.; unknown, 2 w., 6 c.; whooping cough, 1 c.

NORFOLK, VA.—*H. O.*, Dr. Joseph B. Whitehead. *Ppn. est.*, 13,500 w., 9,500 c. *Deaths*: 3 w. m., 8 w. f.; 8 c. m., 6 c. f.; also *stillborn*, 2, color not given. *Ages*: Under 1 yr., 1 w., 3 c.; under 3 yr., 2 w., 3 c.; under 10, 1 w.; under 20, 2 w., 2 c.; under 30, 2c.; under 40, 3 w.; under 50, 3 c.; under 60, 1 w., 1 c.; under 70, 0; under 80, 1 w. *Causes of Death*: Anæmia, 1 w.; burn, 1 c.; cerebral effusion, 1 w.; consumption, 1 w., 2 c.; diphtheria, 1 w.; dysentery, 1 c.; embolism (cerebral), 1 w.; fevers, malarial, 1c.; —, typhoid, 1 w.; hæmatemesis, 1 w.; heart disease, 1 w., 1 c.; inanition and debility, 1 c.; liver disease, 1 c.; lungs congested, 2; pneumonia, 3 c.; scarlatina, 1 w.; unknown or ill-defined, 3c.

MOBILE, ALA.—*H. O.*, Dr. T. S. Scales (Reported by Dr. W. D. Bizzell). *Ppn. census* 1870, 18,115 w., 18,919 c., and about 1,200 creoles, counted as colored in the succeeding part of this report. *Deaths*: 13 w. m., 14 w. f.; 18 c. m., 14 c. f.; also *stillborn*, 2 w., 5 c. *Ages*: Under 1 yr., 5 w., 7 c.; under 3 yr., 2 c.; under 10, 1 w., 1 c.; under 20, 2 w.; under 30, 5 w., 8 c.; under 40, 5 w., 8 c.; under 50, 2 w., 3 c.; under 60, 2 w., 1 c.; under 70, 2 w., 1 c.; under 80, 2 w., 2 c.; under 90, 1 w. *Causes*

of *Death*: Accident, 1 w., 1 c.; apoplexy, 1 w., 1 c.; asthenia and debility, 2 w.; atheroma of arteries, 1 w.; birth, premature, 1 c.; brain softening, 1 c.; Bright's disease, 2 w., 1 c.; bronchitis, 1 w.; consumption, 3 w., 10 c.; convulsions, 1 w., 2 c.; dentition, 1 c.; diabetes, 1 w.; diarrhœa, 1 w.; dropsy, 1 w.; fever, catarrhal, 1 c.; —, typho-malarial, 1 w.; gastritis, 1 w.; gastro-enteritis, 1; hæmorrhage, uterine, 1 w.; heart valvular disease, 2; insanity, 1 w.; liver, abscess, 1 w.; meningitis, cerebro-spinal, 1 c.; paralysis, general, 1 c.; peritonitis, 1; pertussis, 1; pneumonia, 4 w., 4 c.; syphilis, 1 w.; trismus nascentium, 2 w., 3 c.; unknown, 1 w., 1 c.; whooping cough, 1 c.

SELMA, ALA.—*Registrar*, Dr. William P. Reese. *Ppn. est.*, 3,500 w., 4,000 c. *Deaths*: 6 w., 5 c.; also *stillborn*, 2 c. *Ages*: Under 1 yr., 2 c.; 10 to 20 yr., 1 w., 2 c.; under 30, 3 w.; 50 to 60 yr., 1 w.; under 70, 1 c.; under 90, 1 w. *Causes of Deaths*: Consumption, 1 w., 1 c.; dropsy, 1 c.; heart disease, 1 w.; inanition, old age, &c., 1 w.; pneumonia, 4 w., 2 c.

Remarks.—Pneumonia, 6 deaths. This indicates one of two things: (1) A large number of cases; or (2) unprecedented fatality. The lack of disease registration (an important matter) prevents us from arriving at the prevailing diseases. From the mortuary returns, we must say that pneumonia was the prevailing disease. *Births* for January and February, white-males, 6; females, 11. Mulatto males, 2; females, 5. Black males, 3; females, 9—total, 36. *Marriages*, January and February, whites, 5; colored, 47. We expect in future to have perfect statistics.

LANSING, MICH.—*H. O.*, Dr. Henry B. Baker. *Ppn. est.*, 8,463. *Deaths*, 8. Ratio at annual rate in 1,000, 11.89. *Ages*: Under 1 yr., 2; 5 yr. old, 1; 11 yr. old, 1; 27 yr. old, 1; 32 yr. old, 1; 73 yr. old, 1; 84 yr. old, 1. *Causes of Death*: Consumption, 2; gravel, 1; pneumonia, 1; scarlatina, 1; spinal complaint, 1; throat, inflamed, 1; tumor, 1.

Obituary Record.

Dr. O. B. Jenks died from heart disease at his home in Madison county, Va., on March 22d, 1876. During the twenty years of his professional life, he enjoyed a large country practice, and his attainments in medical learning were such as always to demand the highest respect of his professional brethren. He was a member of the Medical Society of Virginia. His wife preceded him to the grave about five months.

M. Gabriel Andral, Honorary Professor of the *Faculté de Médecine de Paris*, Member of the Institute and Academy of Medicine, died February 13, 1876, age 78 years.

VIRGINIA MEDICAL MONTHLY.

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Original Communications.

ART. I.—*The Intermittent Form of Malarial Pneumonia.* By
OTIS FREDERIC MANSON, M. D., Professor of Physiology and
Pathology in the Medical College of Virginia.

The strictly intermittent form of pneumonia, though occurring more rarely than the remittent and continued types produced by the same cause, yet presents itself sufficiently often to entitle it to recognition as a phase of malarial disease. In the opinion of the writer it has frequently happened that this affection has escaped detection until too late to avert a fatal issue. Moreover, it deserves careful study, not only as a curious fact in science, but because it tends to throw a flood of light upon an important and ably contested point in pathology, namely: the relation existing between pneumonia and malaria.

As the very existence of this form of disease has been denied, we shall endeavor to establish it by the opinions of experienced and skillful observers, and by the recital of clearly defined and well attested cases from various authors. As this type of disease is frequently combined with the remittent and continued forms, the literature of these varieties will be considered together.

History.—Hippocrates has bequeathed to us but little in regard to the connection existing between pneumonia and malarial fever—the habitual endemic of ancient as it is of modern Greece. He seems, however, to have had glimpses of the truth. In his

Treatise on Airs, Waters and Places, he embraces pneumonia amongst those diseases produced by drinking "marshy and stagnant waters;"* and in his first book on *Epidemics*, in recounting the various types of fever, he states, "in what is called the semi-tertian, other acute diseases are apt to occur."† Vallesius, a Spanish physician, however, according to our researches, is the first writer who has explicitly stated that he had personally observed a thoracic inflammation assuming the intermittent type. In commenting on the 3d section of the 1st book of the *Epidemics* of Hippocrates, from which the last mentioned extracts have been taken, he observes that he had seen cases of pleurisy of a tertian intermittent type, in which the patient on the alternate days presented no signs of disease.‡ Bearing in mind, however, that the so-called cases of periodical pleurisy of writers antecedent to the discovery of auscultation were really cases of pneumonia, as proven by the autopsies made by Morgagni, Hoffmann, Zechius, Triller, Cleghorn and others, there is but little doubt that Vallesius is the first writer who has recorded a notice of the disease under consideration. It is, however, to Morton,§ an English writer, one of the most discriminating and correct observers of any age, that science is indebted for the earliest approximate description of this and many other periodical diseases. He gives a well-marked case. Senac, a French writer,|| a shrewd and close observer, in his valuable treatise, mentions the disease as one of his varieties of malignant intermittent fever, and relates an interesting case. Torti, an Italian,¶ in his classical treatise on *Pernicious Periodical Fevers*, states that he had seen cases of pleurisy in which the fever presented the double-tertian intermittent type. He does not, however, include such cases in his regular classes. Lautter** and Strack††, German authorities, also describe cases of periodical pleurisy, and relate cases. Burserius,‡‡ an Italian writer, describes the disease under the name of the *pleuritic tertian*, and stated that it was not "uncommon for the complaint to increase to such a degree as to resem-

*The Genuine Works of Hippocrates, Sydenham Soc., by Adams, Vol. i., p. 195.

†Ibid, i, 368.

‡Comment. in Hippocrat. de morb. popular, 1589, p. 82.

§Opera Medica. Lugduni, 1737, i., 95.

||De Recondita Febr., int. tum. remit. natura. Amstelodami, 1759, p. 74.

¶Therapeutice spec. ad Febr. Periodicas Pernicios. Leodi, 1821, i, 294.

**Historia Medica, Morb. Rural. Vindobonæ, 1761, p. 75.

††Observ. Med. de Febr. int. Offenbach, 1785, p. 115.

‡‡Institut. Pract. Med., Edinburg, 1800, i, 341.

ble the suffocating pains of peripneumony, accompanied with chilliness of the external parts." As he mentioned rigors, fever, nausea, vomiting, cough, pungent and obtuse pains in the chest and bloody expectoration as being prominent symptoms, there can be no reasonable doubt that the disease he described was pneumonia. Sauvage,* a French writer, describes the affection under the terms *amphimerina pneumonica* and *tertiana pleuritica*. He states that the first was epidemic in Toulon in 1757, and terminated fatally on the fifth and seventh days. His pleuritic tertian reigned at Montpellier as an epidemic in 1760. Sarcone†, a Neapolitan physician, frequently observed periodical pneumonia. "This fever commenced," he states, "with a rigor, coldness and trembling, in the manner of a double-tertian fever, with pain in the side and general lassitude, and glutinous, yellowish and sanguinolent sputa." It was followed by "acute headaché, thirst and insomnia, and terminated in some by a slight moisture and a manifest remission, and in a very small number of cases by an *intermission*." The disease proceeding unchecked, "increased in violence, and finally became continued and terminated in death on the 9th, 11th, and sometimes on the 14th day."

Friedrich Casimir Medieus,‡ a German writer, who has collected a vast number of cases of periodical affections, includes the disease under the term "Das periodische Seitenstecken." Joseph Frank,§ a high German authority, observes that he had frequently seen pneumonia characterized by periodical intermissions of the symptoms, varying in duration from six to twenty-four hours. J. P. Frank,|| another distinguished German professor and author, relates that in the winter of 1791, intermittent pneumonia was common in Italy, and reigned epidemically in Pavia, producing unprecedented ravages among the population. The cases were remittent and intermittent in their character. Some yielded to bleeding and cinchona, but in several cases in the General Hospital of Vienna, he succeeded in curing it with the bark alone. He records some very interesting cases of the disease, in some of which the intermission of all the symptoms was perfect.

*Nosologie Methodique, 1771, i, 433-464.

†Histoire des Maladies Observ. à Naples, 1804, i, 202-214.

‡Geschichte periodischer Krankheiten, Karlsruhe, 1764, p. 118.

§Præcos. medicæ præcepta, ii, 351.

||Traité de Med. Prat. trad. par Goudareau. Paris, 1842, vol. i, p. 56-176.

The celebrated English surgeon, Cleghorn,* in his admirable work, has given a vivid description of periodical pneumonia. He states that he has, in compliance with custom, "retained the name of pleurisy, though these winter fevers ought rather to be termed peripneumonies," "as proven by his examinations *post mortem*. "These pleurisies," he continues, "began commonly like an ague-fit, with shivering and shaking, flying pains all over the body, bilious vomitings and purgings, quick breathing, immoderate thirst and headache. In a few hours the respiration became more difficult and laborious, the most part of the sick being seized with stitches in their sides. In a *few* of the sick, these complaints *preceded* the fever; in *others*, they did not come on till the *day after*. Many were drowsy and inclinable to sleep, but they raved at intervals." "The heat of the body was in several very moderate, in some less than natural, but for the most part it was so intense as to raise the mercury in Fahrenheit's thermometer to the 102d degree, and often in the afternoon to the 104th." "Besides some abatement of the fever, which commonly happened every morning, it was *remarkable* that upon the *third day*, or beginning of the fourth, there was frequently a great remission, sometimes a *total cessation of every violent symptom*, so that the sick were thought to be out of danger. But on the fourth or fifth, a delirium suddenly came on, or the breathing became more difficult than ever, and one or both these symptoms increasing hourly, the patient expired in a day or two either suffocated or raving mad," unless assisted by Nature or Art.

The work of Mongellaz† is very valuable, as containing the record of a large number of cases of periodical pneumonia, collected from numerous sources. Some of them we have already noticed, and shall quote hereafter.

Puccinotti,‡ Professor of Clinical Medicine in the University of Pisa, in his classification of the pernicious fevers he observed in Rome in 1819, 1820 and 1821, accords to the disease under consideration an extended notice, and gives some interesting cases.

Alibert§ devotes an article in his valuable work to this disease,

*Observations on Epidemical Diseases of Minorca 1744 to 1749. London, 1768, pp. 261-66.

†Monographie des Irritationes Intermitt., Paris, 1839, p. 350-369.

‡Opere Mediche, Milano, 1855, i, 112.

§Traité des Fievres, Pernicieuses Int., Paris, 1820, p. 57.

which he terms "*La Fièvre pernicieuse peripneumonique or pleuretique*," and says that it was observed in Paris in the year IX. He quotes cases from Morton and Lautter, and relates one of his own.

Chomel* briefly notices this modification of pneumonia. He observes: In regard to its course, pneumonia may also present some peculiarities; this occurs when it presents—rarely, it is true—the *intermittent type*. It is necessary to remark, however, that in these cases the phlegmasia of the lung does not constitute the sole disease, but that it is united to an intermittent or remittent affection, whose phases it follows. We see, in fact, the symptoms of the inflammation of the lungs are developed, increase with the febrile movement, and cease, or, rather, diminish with the termination of the paroxysm. Pneumonia becomes, in these cases, one of the forms of pernicious fever (*fièvre pernicieuse pneumonique*).

We have now arrived at a period in the history of this disease when a new and brilliant light was shed upon the diagnosis of the diseases of the chest, and whilst it corrected in some degree the views of previous observers in the malady we are now considering, yet served to ratify the diagnosis which astute practitioners had framed from a close study of the rational symptoms. The great Laennec arose and by applying a neglected sense to the study of disease, founded the science of auscultation. As far as we have been enabled to ascertain, however, he has written but a few lines with regard to this disease, but these are sufficient to establish by his high testimony some of the most important facts connected with it. In his chapter on *Latent and Symptomatic Peripneumony*, he observes: "We ought to range among the symptomatic peripneumonies, those which constitute the predominant symptom in peripneumonic pernicious fevers. The pathological anatomy of this affection has been imperfectly ascertained, since it is rarely fatal, as our science possesses a sure remedy in cinchona, wherever it has been employed. Some facts, however, have proven that traces of real pneumonia have been discovered on examination after death. I have myself observed a very intense crepitant râle and glutinous sputa in two cases of peripneumonic pernicious fever."†

*Dict. de Médecine (en 30 vols) Paris, 1842, xxv, 190.

†Traité de l'Auscult., Médiata. Par R. T. H. Laennec. 3^{me} ed. Paris, 1831. Tome i, 479.

These are all the facts to be gathered concerning our subject from his immortal treatise, but M. Boisseau relates a case of the disease which he states M. Laennec had explored and treated. As the case is very interesting, not only on account of its origin, but also from the important facts contained therein, we shall reproduce it in full.

Since the time of Laennec, pneumonia observing the various types of paludal fever has been noticed and described by writers* in Europe, Asia, Africa, and in our own country, and although the clearly defined intermittent cases are much less numerous than those of the remittent and continued types, yet they are sufficient to establish its real existence and to elucidate its nature. By the aid of the ear, we are enabled to discover the invasion of the local changes and the periodical mutations in the structural condition of the lungs, corresponding with the type of fever present.

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- *Williamson (Dr. Hugh) *Medical Repository*, New York, 1805, ii, 146.
 Vaughan (Dr. John), *Ibid*, New York, 1801, iv, 131.
 Cartwright (Dr. Samuel A.) *Medical Recorder*, Philadelphia, 1826, x, 41.
 Sherell (Dr. Hunting M.), *Ibid*, Philadelphia, 1827, xii, 391.
 Nepple, *Fièvres Remit. et intermit.* Paris, 1828, p. 124.
 Gregoire (Mem. des Hopitaux du Midi, 1829), from Mongellaz, *op. cit.*, i, 350.
 Sawyer (M. E., of N. C.), *Treatise on Fever*, p. 116, New York, 1831.
 Roche et Sanson, *El. de Path. Med-Chirurg.*, i, 143, Paris, 1833.
 Faure, *Des Fievres.* i, 166. Paris, 1833.
 Cazenote, *Gazette Médicale de Paris*, p. 774. Paris, 1834.
 Puntous, *Revue Médicale*, iii, 64. Paris, 1834.
 Maillot *Traite des Fièvres*, pp. 41, 126. Paris, 1836.
 Eisenmann, *Die Krankheits-Familie Typhosis*, p. 465, Zurich, 1839.
 Grisolles, *Traité de la Pneumonie* (1re. ed. 1841) 2me. ed., p. 411. Paris, 1864.
 Coolidge, U. S. Army Report, p. 269, 1839-54.
 Glisan, *Ibid*, Report, p. 276, *Ibid*.
 Mondiere, *Revue Médicale*, ii, 183, Paris, 1843.
 Chapman, *Benedict's Compend.*, p. 217. Phila. 1846.
 Boling, *Amer. Jour. Med. Sci.*, viii, 93. Phila., 1846.
 Day, *Med. and Surg. Journal*, ii, 576. New Orleans, 1846.
 Merrill, *Ibid*, viii, 14. New Orleans, 1852.
 McCaw, *Stethoscope*, ii, 671. Richmond, Va., 1852.
 Williams, *Cyc. Prac. Med.*, iii, 634. Phila., 1852.
 Rouxeau, *Bulletin de Therapeutique*, xliii, p. 505. Paris, 1852.
 Constant, *Ibid*, xliii, p. 481. Paris, 1852.
 Bonnet, *Traité des Fièvres Int.*, p. 77. Paris, 1853.
 Gintrac, *Pathologie Interne*, iii, 807-810. Paris, 1853.
 Catteloup, *Pneumonie D'Afrique*. Paris, 1853.
 Wood, *Practice of Medicine*, ii, 17. Phila., 1853.
 Drake, *Dis. of Int. Valley of N. America*, p. 868. Phila., 1854.
 Semple, *Va. Med. Journal*, ii, 383. Richmond, 1854.
 Anderson, *N. O. Med. and Surg. Jour.*, xi, 78. New Orleans, 1854.
 La Roche, *Pneumonia and Malaria*. Phila., 1854.
 Briquet, *Traité Therap. du Quinquina*, p. 483. Paris, 1855.
 Manson, *Trans. Med. Soc. of North Carolina*. Wilmington, N. C., 1857.
 Campbell, *Trans. Amer. Med. Assoc.*, xi, 626. Phila., 1858.
 Morehead, *Disease in India*, pp. 54-527. London, 1860.
 Griesinger, *Infektionskrankheiten*, p. 54. Erlangen, 1864.
 Berenguer, *Traité des Fievres Int. et remit.*, pp. 257-274. Paris, 1865.
 Colin, *Traité des Fievres Int. Pneumonia Palustre*, p. 303. Paris, 1870.
 Jaccoud, *Pathologie Interne*, ii, 605. Paris, 1871.
 Castan, *Traité des Fievres*, p. 255. Paris, 1872.
 Trousseau, *Clinical Medicine*, ii, 688-694. Philadelphia, 1873.
 Hirtz, *Nouveaux Dict. de Med. et de Chir.*, xix, 208. Paris, 1874.
 Hirtz, *Ziemssen's Cyc. Pract. Med.*, ii, 611. New York, 1875.

We now beg leave to present to the reader a few cases selected from different authors. Many more might be quoted from our collection, but these are sufficient to establish the existence and phenomena of the disease beyond the reach of cavil. It would no doubt be interesting to the student of our most important endemics to peruse cases from the old masters; but as their histories were not illustrated by the physical signs, they would not satisfy the rigid requirements of modern diagnosis, besides consuming an unwarrantable space.

Laennec's Case, as reported by M. MARTINET.—A man, thirty-five years of age, robust and muscular, entered the hospital for a recent syphilis, which had been imperfectly treated and but partially cured. He had been taking sudorific drinks and using mercurial frictions. On the sixth day of his admission he experienced an attack of very violent fever, of which he declared that he had had a paroxysm two days before. A third access was expected, which in fact occurred on the third day; but the latter was altogether different from the first. It commenced with a more intense chill, and was accompanied with violent cephalalgia, extreme dyspnœa and hæmoptysis. The chest having been explored about the middle of the paroxysm, a very clear respiratory murmur was heard throughout, except at the root of the lungs, where there was present a well-marked crepitant râle, which was heard most evident on the right side. M. Laennec did not hesitate to declare the case was one of double pneumonia in the first stage. Six grains of tartar emetic and eighteen grains of sulphate of quinine were prescribed to be taken in three doses. The patient vomited slightly and had one stool, and on the next day believed himself to be cured. But as the crepitant râle had not entirely disappeared after the cessation of the febrile paroxysm, the combined medicines were continued. The following access was very brief, the crepitant râle was slightly developed, whilst it continued and the hæmoptysis reappeared, but the fever had hardly ceased when all the symptoms disappeared. The tartar emetic was discontinued on the fifth day, the respiration having become clear and natural; the sulphate of quinine was continued for a few days. The patient remained free from fever, and the anti-syphilitic was resumed, which had been suspended during the attack. Three weeks afterwards the intermittent fever reappeared again; but this time it was simple and benign, and a few doses of quinine were sufficient to arrest it. The patient remained nearly six weeks in the hospital, and was discharged in good health (*Pyretologie Physiologique*, par F. G. Boisseau, Paris, 1860, p. 605).

Tertian type. By M. GREGOIRE.*—Jauffert, a shepherd, æt. 46, of a strong constitution, returning from carrying a burden of wet linen on the banks of the Rhone, a quarter of a league from his home, was taken, the 26th of July, 1827, with a violent chill, which endured nearly an hour, and after which he experienced a painful stitch beneath the left mamma, accompanied with a dry and frequent cough, which wearied him exceedingly. Perceiving that this pain increased in intensity, he took his bed. I saw the patient at 10 o'clock in the morning, three hours after the invasion of the chill, when he presented the following symptoms: Intense redness of the cheeks, a jerking cough, with a purely catarrhal expectoration and dyspnœa. The cough, percussion and inspiratory movements augmented the pain in the side; pulse frequent and full; skin dry and hot; sonoriety of the thoracic parieties throughout their whole extent; respiratory murmur less distinct on the left than on the right side. (Fifteen leeches over the painful point; pisan of barley water and gum, almond emulsion.)

At 2 o'clock P. M., the cough had become more frequent; the patient expectorated rust-colored sputa, which were viscid and adherent to each other, but easily detached from the sides of the vessel. A crepitant râle had supervened on the left side throughout the whole extent of the inferior lobe of the left lung; persistence of the painful stitch and augmentation of the dyspnœa. I immediately bled the patient copiously, after which he appeared a little tranquil; but at the end of half an hour the symptoms all grew worse, the intellectual faculties became disordered; the patient was almost suffocating; the sputa expectorated adhered to the vessel and assumed a more pronounced red tint. I did not revisit the patient until 6 o'clock in the evening; then his skin had already become moist, and he was soon covered by an abundant sweat, which continued all night. From this time a remission of all the symptoms occurred; the sputa again assumed a purely mucous character; they were easily detached from the vessel, although adhering to each other; the crepitant râle could now scarcely be heard. On the next morning the *fever* had *completely disappeared*, and along with it *all* the symptoms of pneumonia. The simultaneous cessation of the fever and the pleuropneumonic symptoms, and the slight success which we had obtained from the sanguineous evacuations; the rarity or general absence of truly inflammatory affections at the existing season; and finally, the epidemic prevalence of the grave intermittent fevers which then reigned, led me to consider this disease as a real pernicious pleuro-pneumonic fever. I therefore hastened to

*Memorial des Hopitaux du Midi, 1829, from Mongellaz, i, 350.

prescribe a powder composed of fifteen grains of sulphate of quinine and a drachm of extract of cinchona, to be taken within the twenty-four hours. The patient obstinately refused to follow my prescription, pretending that the remedy would, at the least, be useless, as he was not conscious of having any disease. The day of the 27th was passed very well, and this man felicitated himself on having shown himself deaf to my representations; but at 7 o'clock on the morning of the 28th a chill similar to that which he had on the 26th, at the same hour, opened the scene of the second paroxysm, which was more marked than the first. The progress of the symptoms, though gradual, was extremely rapid. At noon, five hours after the invasion of the fever, the case seemed desperate; the respiration was extremely difficult; the patient was panting for breath: there was no expectoration; percussion dullness existed throughout the whole left lung; a mucous râle was heard beneath the clavicles; the patient's face was pale, with a slight shade of lividity; his pulse was very accelerated, but easily compressed; his skin was rather cold than warm, his tongue moist and covered with a brownish coat, and the patient was greatly prostrated. (Two sinapisms to the legs; decoction of two ounces of cinchona in eight ounces of wateredulcorated with two ounces of syrup of quinine.) At 3 o'clock there was a return of heat; the pulse became fuller and less easily compressed; face more colored; expectoration of some sputa which were rusty and extremely tenacious. The rest of the symptoms persisted. About 5 o'clock the skin became covered with a slight moisture, and soon a copious sweat was established. All the symptoms diminished and disappeared in the course of the night. On the 29th, in the morning, the patient was without fever, but the sound was still flat in the posterior inferior region of the left side of the thorax, and the respiratory murmur was not very distinctly heard in the inferior lobe of the left lung. The febrifuge powder which the patient had refused to take on the 27th was administered to him during the day, every two hours and in successively decreasing doses. The fever returned no more; the cough accompanied with a purely mucous, but very abundant expectoration still persisted three or four days, at the end of which the man was sufficiently well to resume his usual occupation.

Tertain type. By ROCHE ET SANSON.*—A Parisian fireman presented to us an example of intermittent pneumonitis at the Hôtel-Dieu, in the autumn of 1821; and this case, which was observed by many students with us at the same time, is especially interesting, from the fact that the cylinder enabled us to

*Nouv. Elemens de Patholog. Med-Chirurg., i, 440. Paris, 1853.

hear, during the paroxysm, a crepitant râle, which was more marked at the inferior and posterior region of the right lung, and to observe that this sign was infinitely less pronounced during the apyrexia. A bleeding from the arm was practised during the first paroxysm, because the intermittent character of the phlegmasia was not suspected. On the following day all was calm, with the exception of a slight degree of oppression and a very faint râle. A few leeches were applied on the crepitating part. The intermission lasted 24 hours. In the second paroxysm, which was a little less violent than the first, the bleeding was repeated, the râle had almost regained its previous intensity. A third paroxysm occurred, after which the sulphate of quinine was administered, which prevented the fourth. The patient informed us that he had had two paroxysms at home, and had expectorated some sanguinolent sputa on the first day.

History of a Case of Peripneumony of the Pernicious Form. Tertian Type. By Dr. CAZENTRE.* Castagnet, a locksmith, 22 years of age, in the night of the 27th of April, 1834, was seized with a fixed and acute pain below the left nipple. His respiration was difficult, painful and accelerated. In the morning, he entered the hospital (service of M. Dutrouilli), and presented the thoracic symptoms cited, and also bloody and viscid sputa, fine and dry crepitant râle, throughout a space of 4 to 5 inches posterior to the precordial region; anxiety extreme, pulse frequent and full, cephalalgia, redness of the face, etc. Venesection, 12 ounces; looch (gum, almonds and sugar); pectoral infusion.

29th. Absence of fever, crepitant râle, and pleuritic pain.

30th. The patient is perfectly well; he walks about and eats with an appetite.

May 1. At our morning visit, we find Castagnet in a state of intense suffering. The thoracic viscera present the phenomena already cited in the preceding attack; he experiences an intolerable pain in the same region as before; he says that he is suffocating; his face is covered with sweat; the sputa are very red and less viscid. A large blister plaster over the painful side; potions composed of two drachms of pulverized cinchona and ten grains of sulphate of quinine; pectoral drinks.

At night the oppression is extreme, and the danger imminent. M. le chef interne, prescribe sinapisms to the legs, and a potion containing six grains of tartar emetic.

May 3. All the symptoms have disappeared; there only remains an occasional rare cough, which still produces a slight pain; the patient requests food. On the following day he is

*Gazette Médicale de Paris, 1834, p. 774.

tormented with hiccough, which wearies him; with that exception, he is perfectly recovered. He remained in the hospital until the 10th, and was discharged well.

M. MAILLOT* reports the following: Burghard, a soldier of the foreign legion, of a good constitution, aged 22 years, having had several attacks of intermittent fever since his sojourn in Africa, entered the hospital of Algiers the 25th of November, 1733, on the fifth day of a tertian fever, whose paroxysms returned at 6 o'clock in the evening. He came, when I saw him at 3 o'clock in the afternoon, aided by his comrades. He walked with difficulty to the hospital, and had travelled about two leagues on foot, exposed to a very cold rain. The left side of the chest, for a great extent, was the seat of a very acute pain, which impeded the respiratory movements; he made frequent efforts to cough without expectoration; during the second paroxysm (on the previous evening) he had expectorated sanguinolent sputa. The first paroxysm was accompanied with the pleuritic pain only. As the third was to be expected at 6 o'clock in the evening, the principal indication was to prevent it. The journey which the patient had made had so chilled him, and his pulse was so little increased, that I did not prescribe general bleeding. Diet: gum water; forty grains of sulphate of quinine to be taken immediately; fifty leeches on the painful part. The paroxysm returned at the usual hour. At 10 o'clock at night, the pulse became full and large, the skin warm, and the sputa striated with blood. Venesection, from the arm, ten ounces.

26, A. M. Fever; acute pain in the side; pulse small and accelerated; respiratory movements very painful. Diet: gum water; sixteen grains of sulphate of quinine; 25 leeches to painful side.

3 P. M. Continuation of the fever; sanguinolent sputa, crepitant râle. Venesection, 8 ounces.

9 P. M. Condition the same. Venesection, 10 ounces; 16 grains of sulphate of quinine to be taken during the night.

27th, A. M. Fever slight; obscure pain in the thorax; no bloody sputa; crepitant râle less distinct and extended. Low diet; gum water; 16 grains of sulphate of quinine. The amelioration continued during the whole day.

28th, A. M. *Apyrexia*; no râle; no pain in the thorax. Low diet; gum water; 16 grains of sulphate of quinine. Paroxysm occurred in the morning; *pleuritic pain very acute*; crepitant râle and sanguinolent sputa. Low diet; gum water; venesection, 12 ounces; 25 leeches to the base of the left lung; 16 grains of sulphate quinine to be taken during the night.

*Traité des Fièvres Intermittentes, p. 126. Paris, 1836.

From this moment all the symptoms were dissipated promptly; the sulphate of quinine was continued, and in a few days the patient's health became perfectly re-established.

J. B. MONDIERE* reports the following: On February 27th, 1843, about 2 o'clock P. M., I was requested by B., an editor, to attend his wife, who, in the morning, had been taken with a violent chill, which was soon followed by acute pain beneath the left breast, with cough and sanguinolent expectoration. Visiting her almost immediately, I learned the following facts: She is 55 years of age; of tall stature; originally of very strong constitution, but now weakened by poverty and toil; she has an habitual cough in winter; she has never experienced any grave disease, and is the mother of twins, aged 13 years. She informed me that she was in good health the previous evening, but on arising this morning, she was taken about 11 o'clock without appreciable cause with a violent chill, followed by pleuritic pain, cough, etc. When I examined her, her fever was intensely high, her pulse beating 90 to 100 per minute, her tongue was red at the tip, thirst extreme, cough frequent, expectoration difficult, respiration painful, and the sputa pathognomonic of pneumonia. Percussion yielded a flat sound through the whole extent of the inferior third of the left lung, and auscultation revealed the existence of well-characterized crepitant râles. From this assemblage of symptoms, I was easily enabled to form a diagnosis and a basis of treatment. I immediately bled the patient 15 ounces; ordered the application of 12 leeches *loco dolenti*; sweetened rice water as a drink; a solution of Kermes' mineral, and absolute diet.

At 7 P. M., a messenger from the patient informed me that the symptoms I have mentioned had persisted for four hours, when she was taken with an abundant sweat, in the midst of which the cough, pain in the side, oppression and sanguinolent sputa disappeared. I considered this to be a favorable crisis by the skin, and I directed that the patient should continue the same treatment, with the promise to visit her early on the morrow.

On the 13th, at 8 A. M., I saw the patient. I found her in good spirits, requesting food, without heat of skin, without fever, the pulse 70, the tongue large, moist and without redness. She no longer experienced either cough or pain in the side. The chest resounded clearly, and the ear only discovered a slight obscurity of the respiratory murmur, where on the previous day it was absent, and where it had been replaced by the crepitant râle. I believed I had jugulated a case of pneumonia, and fe-

*Rèvue Médicale, June, 1843, p. 183.

licitated myself on the efficiency of the active treatment in a disease which is so often of intense gravity, and I left the patient, merely prescribing the continuation of demulcent drinks and moderate diet.

My satisfaction was not of long duration. At 12 o'clock I was again requested to visit the patient, and was informed that the patient was worse than on the 12th. As on the day before at 10 o'clock, she had experienced a severe chill, which endured about a half hour, and was followed by the same symptoms as on the preceding day—fever, thirst, pleuritic pain, cough and sanguinolent sputa. On my arrival, I found these symptoms present, and was enabled, by the aid of percussion and auscultation, to ascertain the return of the dullness and crepitant râle. Her pulse was soft and very compressible, which facts, together with my belief of the case being an intermittent disease, prevented me from a repetition of the bleeding, resolving to observe carefully the progress of the disease, and to recur to the specific remedy, if, as I thought, the access should terminate by the return of the sweating stage, and with that, the cessation of all the symptoms described. At my second visit, made at five o'clock in the evening, I found the patient perspiring. She had already twice changed her chemise, and stated that she felt a great improvement in her condition. This perspiration and the relief which had already followed it, confirmed the opinion which I had formed in the morning as to the true character of the disease present, and I resolved on the morrow to employ the treatment it demanded.

On the 14th, supplied with the sulphate of quinine, at seven o'clock in the morning I re-visited the patient, who had passed a good night. She was without fever, without cough or pain, and if it had not been for a certain kind of pallor, and a certain degree of debility, the patient would not have been thought ill. I immediately gave 4 grains of sulphate of quinine, and left a similar dose to be taken two hours afterwards, and at the same time prescribed a strong decoction of centaury. On this day the access, instead of commencing, as on the two preceding days, at 11 o'clock in the morning, did not appear until 4 o'clock in the afternoon. The chill was but slightly marked, the fever less violent, the pain in the side almost absent, the cough less intense, and the sputa scarcely sanguinolent. At 7 o'clock in the evening the paroxysm terminated in a moderate perspiration.

On the 15th, the patient again took 10 grains of sulphate of quinine in three doses—that is to say, at 7, 9, and at 11 o'clock in the morning—the decoction of centaury being also continued. On this day the apyrexia was complete, and no symptom of the

expected paroxysm occurred. On the 16th and 17th the use of the sulphate of quinine was continued. On the 18th a mild purgative was given, and since then until the present, March 20, the patient has been free from disease, and has resumed her usual occupation.

M. ROUXEAU* reports the following case: On the 10th of January, 1845, I was called to a young man of 19 years of age, who was thought to be dying. This young man, a groom to M. Maisonneuve, at Tertre, near Sautron, at night had fallen into a state of such violent suffocation as to create fears that he would die during the night. On my arrival, I found him extended on his bed, almost unconscious, and unable to respond to my questions. His face was red and swollen, and his eyes were sparkling. His chest was heaving in violent and frequent efforts at inspiration, and his cough was painful and frequent. His bed and clothes were covered with bloody sputa. Percussion yielded a normal sonoriety; his respiration was slightly rude on the right side anteriorly about the middle third, full and puerile on the left. Posteriorly on the right, over the whole of the middle lobe, a fine and abundant crepitant râle was heard, without any trace of bronchial respiration; on the left, posteriorly, puerile respiration was heard, as stated above, but without any râle. His skin was burning, the pulse firm, full, and 100 per minute. It was impossible to obtain a word, even by signs, from this unhappy man, who appeared to be suffocating. But the symptoms were sufficiently evident, and the existence of pneumonia could not be mistaken. The patient was strong and vigorous; the reaction frank and violent. I bled him to the extent of 17 ounces—the blood becoming immediately covered with a thin crust. Sinapisms were applied to the legs, and warm mucilaginous drinks administered during the night.

On the 11th, at 7 o'clock in the morning, my surprise was extreme at beholding the patient calm and smiling. His skin was soft and cool and pulse 62. There was an entire absence of cough, dyspnœa and bloody expectoration. The thoracic sonoriety was perfect, and auscultation, practised with all possible care, did not reveal the least trace of crepitant râle. It seemed like a dream. This rapid disappearance of the most menacing cortège of symptoms was indeed strange. I questioned the young man, who gave me the following history of his disease: On the 7th of January, at 8 A. M., he experienced a chill of an hour's duration, followed by fever and sweating, but without cough or oppression. On the 8th he had a similar access at the same hour. On the 9th, at noon, he had a third attack, but at-

*Bulletin General de Thérapeutique, xliii, 505. Paris, 1852.

tended by a more violent chill, which was more prolonged, and followed by oppression, incessant cough, rusty expectoration and acute pain in the right side. He was then compelled to take his bed. On the next morning, the 10th, the cough, pain in the side and oppression disappeared, and no symptom of the disease remaining except slight debility, he returned to his employment. But at noon the chill returned, which was prolonged, violent, and accompanied by pain in the side, dyspnœa, cough and sanguinolent sputa. His condition rapidly became aggravated, and the disease assumed such a fearful intensity that he applied for the relief of art. I then found I had to contend with a pernicious pneumonic intermittent fever. The absolute absence of information in regard to his case on the night preceding, had rendered me powerless against the third terrible and menacing paroxysm, which we were compelled to expect if it was not prevented in five hours. I went out in great haste and sent 22 grains of sulphate of quinine, which I directed to be given to the patient in three doses, at intervals of half an hour. By an incredible negligence, the first dose of the medicine was not administered until 5 o'clock in the evening. At 6 o'clock the third paroxysm appeared, without my being informed of it as promised. This paroxysm was horrible; the same symptoms present on the preceding night returned with aggravated violence. Happily, either owing to the bleeding, or, more probably, to the sulphate of quinine taken at 5 o'clock, the patient withstood the paroxysm. On the 12th, at 7 o'clock in the morning, I found the patient in a paroxysm similar to those I had witnessed on the nights of the 10th and 11th; the same anxiety; the same paroxysms of cough and bloody sputa. But the pleximetric and stethoscopic signs were changed. Beneath the right infra-spinal fossa, there was perceived a very evident dullness and bronchial respiration, surrounded by fine but rare crepitation, with manifest bronchophony. His pulse was 110-115, strong and full; skin warm; face red, and eyes sparkling. He was bled again 17 ounces, and 8 grains of sulphate of quinine administered immediately. Two similar doses were afterwards prescribed to be taken hourly, with the injunction that a failure to follow the prescription would endanger the life of the patient. This time my orders were followed to the letter.

At night the fever had totally disappeared; the pulse was 60, soft and compressible; the skin cool; the dyspnœa had disappeared, as well as the pain in the side. The cough was rare, and produced the expectoration of viscid sputa of the color of apricot jelly. The dullness continued over the same region, as well as the bronchial respiration and bronchophony; the crepi-

tant râle was more abundant and more humid than in the morning. Soup was prescribed.

January 13. The condition of the patient is very satisfactory; he is calm; has no cough, nor does he experience any pain in the side, or oppression. There exists slight relative dullness beneath the infra-spinal fossa, where the ear perceives a slight bronchial respiration, limited and surrounded by the most clearly evident returning crepitant râle. The pulse is 60 and undulating; the skin cool, and appetite vigorous. Quinine, 15 grains, in two doses.

January 14. Very slight bronchial respiration; moist, crepitant râle; pulse 60. The inflammatory congestion, though extinguished in its source, has left in the lung a profound organic lesion, which is disappearing slowly. Prescribed tartar emetic, 5 grs., ext. opium, 1 gr. The medicine produced a very violent commotion, and the expectoration, or, rather, vomiting, of a viscid, ropy fluid. But the following night was passed in perfect calm, and on the 15th there only remained a few bubbles of mucous râle beneath the right infra-spinal fossa. The patient was endued with a voracious appetite, and soon recovered from the great prostration incident to the disease.

Intermittent Pneumonia—By M. CATTELOUP.*—Pierre Lafont, æt. 24, a soldier of the second battalion of Zouaves, after having contracted, at Seb dou, a quotidian intermittent fever, entered the hospital on the 7th of January with bronchitis of six days' duration. The fever appeared every morning at 8 o'clock. On the 8th, his fever appeared and passed through its three stages. Besides this, the patient coughed a great deal, especially during the paroxysm; he experienced an acute pain in the right side and dullness on percussion, and bronchial breathing were perceived beneath the scapula. There was no crepitant râle or sanguinolent sputa; pulse moderately developed—88 pulsations per minute. Venesection, 12 ounces; 10 grains of sulphate of quinine.

Night, perfect calm of the symptoms; blood covered with an inflammatory crust—the physical signs remaining the same. Potion with 4 grains of tartar emetic.

9th. Another paroxysm of fever, less intense than that of the day before; sputa rare, without traces of blood; bronchial breathing less pronounced. Four scarified cups; 10 grains of sulphate of quinine.

10th. Slight exacerbation at the usual hour of the paroxysms, without an initial chill; skin warm, moist, followed by abundant perspiration. Vesicatory to the side; sulph. quinine in the morning; tartar emetic at night.

*Pneumonie D'Afrique, p. 22. Paris, 1853.

11th. No paroxysm has appeared; skin natural; sputa slightly rusty; feeble bronchial breathing; returning crepitant râle perceptible; four liquid stools. Continuation of sulphate of quinine, followed by 15 grains of Kermes' mineral.

12th. Respiration is free and vesicular; pain very slight; pulse 60; slight bronchial breathing, with a few bubbles of mucous râle. From this period the convalescence of the patient was assured, and a cure rapidly occurred.

Pernicious Intermittent Pneumonic Fever. Tertian type.
By FRANCIS SAILLARD.* Benjamin D., æt. 21, a ditcher, entered the Hotel-Dieu, at Nantes, ward 7, No. 4 (service of M. Marcé). This young man, whose previous habitual health was excellent, had never been the subject of intermittent fever, which is but little known in his country. He had resided for only a few months in the department of the Loire-Inferieure, and lived in a village near Nantes. The house which he occupied is near a pond which becomes dry during the summer, leaving the vegetation dry, which putrefies and evolves miasms. The only window of his chamber, where he slept, opened immediately over this pool of water. He was employed in the excavation of the railway from Nantes to Saint-Nazaire for six weeks, during which time he had been in perfect health. Two days before his entrance, he experienced a sensation of fatigue, and a feeling of soreness in his limbs, extreme general lassitude, cephalalgia, anorexia, and very great malaise. In the night which preceded his admission, he felt chilly, which was followed by fever, succeeded by perspiration. He presented the following symptoms:

First day, evening. General malaise, cephalalgia, lassitude, inappetence, thirst, gastric disorder. Second day, morning. Continual malaise; symptoms of gastric derangement; fetid breath; tongue foul and expanded, and covered with a thick, yellow coating; constipation. Ol. ricini; gum water; soup, a quarter ration. At 6 o'clock in the evening, we found the patient in a state of very great agitation. His face was injected, his eyes brilliant, cheeks red; his skin was hot; the pulse moderately developed and compressible; beat 96 per minute. The patient complained of an intense pain in the left side of the thorax, below and external to the left nipple. He coughed, and at the end of the paroxysms expectorated *viscid* sputa, which *adhered* to the vessel, were filled with *bubbles*, and resembled *apricot jelly*. The respiration was anxious, 36 inspirations per minute. Auscultation practised over the point indicated as the seat of pain, revealed no morbid state; but in the posterior region of the chest, and near the base of the lung, numerous crepitant

*Thèse pour le Doctérat en Médecine, p. 14. Paris, 1860.

râles were heard, evolved in puffs at each inspiration; vocal resonance was also heard, without broncophony; relative dullness on percussion was very apparent. On the right side, nothing abnormal was perceived. Believing that we had a case of frank pneumonia of ordinary intensity, and having regard for the state of the pulse, we gave a contra-stimulant potion. The paroxysm was prolonged until towards midnight, and terminated in an abundant sweat.

Third day, morning. The patient felt well, and believed this amelioration ought to be attributed to the potion given on the evening before. There was no pain, dyspnœa, cough or expectoration, nor any appreciable stethoscopic phenomena. Percussion revealed nothing; the patient desired to eat. A half ration allowed. The day was passed very comfortably.

Fourth day, morning. The patient is free from disease. He has passed a very good night.

About an hour after noon, the symptoms of the second day reappeared with frightful intensity. The patient experienced a violent chill; he was restless in his bed, spoke in loud tones, and complained of an extremely acute pain in the left side. His countenance was excited; his eyes injected; his skin very warm; the pulse was tremulous, and presented very long intermissions, and beat 100 to 104 times per minute; cough frequent, with abundant expectoration of characteristic rusty sputa. On auscultating the chest, we heard on the left side and posteriorly near the junction of the middle and lower third of the chest, very marked bronchial breathing, with manifest bronchophony. Around the place where this sound was heard, abundant crepitant râles were heard. The thoracic vibrations were exaggerated; dullness almost absolute and resistant to the finger. On the right side, posteriorly, puerile respiration was heard, and the same was heard anteriorly over both sides. The patient was ordered to take 1 gramme 50 centigr. (about 23 grains Troy) of sulphate of quinine immediately.

M. Marcé, our chief, was then visiting the Hotel-Dieu. Before his departure, we requested him to visit the patient, in whom he observed all the phenomena we have described. The spleen, palpated and percussed, did not seem to have augmented in volume, nor did the patient, in its region, feel any pain.

Our chief diagnosed pernicious intermittent pneumonic fever, tertian type, without pain or swelling of the spleen.

This paroxysm continued until 11 o'clock at night, and was terminated by an abundant sweat. About this hour, the patient also took 23 grains of sulphate of quinine.

Fifth day, morning. The state of the patient has become sin-

gularly changed; he was in a state of perfect calm. There is neither oppression nor frequent cough, but from time to time he coughs a little. The expectoration is no longer colored. We heard slight and scattering crepitant râles, but neither bronchial breathing nor broncophony. There was no manifest dullness on percussion, nor reactive fever; pulse 80; respirations 20; skin pleasant. Prescribed 23 grains of quinine in two doses—the first then, and the second at night. The day was passed very well. In the evening, the chest, interrogated attentively, only revealed a few râles, with coarse and humid bubbles.

Sixth day. The patient is doing very well; he only complains of ringing in the ears, and a slight headache (pneumonia (?) due to the ingestion of the sulphate of quinia). He has a slight appetite. Soup, a quarter ration; sulphate of quinia, 11 grains. About 4 o'clock in the afternoon, the patient felt a certain degree of malaise, and only wished to take a little of the soup presented to him. This malaise was soon dissipated. After this day, the sulphate of quinine was administered in decreasing doses, and a week afterwards he was discharged in excellent health.

Symptoms.—Intermittent pneumonia is usually ushered in by a chill or cold stage, which may be slight and transient, or grave and protracted, as in the algid or congestive form of pernicious fever. Usually, however, although the initial chill is of a decided character, yet a prompt and perfect reaction occurs. With the development of fever, headache, nausea and vomiting frequently supervene. The skin is hot and dry, the face flushed, eyes injected, tongue dry, and more or less coated; the pulse frequent and quick, with restlessness, anxiety, and occasionally, delirium. In the first access, the thoracic symptoms may declare themselves, yet, in some cases, two, three or more paroxysms appear before any indication of implication of the lung can be detected. This is commonly announced by acute pain in the side, cough, frequent irregular panting respiration—sometimes attended by a most distressing sense of suffocation—mucous-sanguinous expectoration, the sputa being nearly wholly composed of blood or chiefly of mucous tinged with blood or frothy semi-transparent, rust colored, and more or less viscid and adherent to the vessel. Accompanying these general and local symptoms, we have the physical signs of engorgement of the lung parenchyma. Writers on the subject differ in some respects in regard

to the presence and frequency of the crepitant râle as described by Laennec, and although I must state I have been frequently unable to detect it, yet the testimony in favor of its general occurrence preponderates. We will revert to this point hereafter. In the gravest forms of this disease, the lung passes rapidly into a state of consolidation—this lesion, according to some, being a real hepatization, and, according to others, an intense congestion, terminating in a state approaching to stasis or entire arrest of circulation in the part affected, analogous to the condition of the spleen in ordinary intermittents. However this may be, relative dullness on percussion is often very soon observed in the milder cases, and in the graver forms perfect and extensive flatness is evident in a few hours after the first invasion of the disease. This I have myself observed before the patient emerged from the initial cold stage. In this condition, bronchial respiration and broncophony are sometimes, but not invariably, present.

Intermittent pneumonia may assume any of the types observed in paludal fever, but the quotidian and tertian are by far the most frequent.

The febrile paroxysm, after a variable duration, according to its type and intensity, but usually in the course of from six to twelve hours, terminates in an intermission. With the cessation of the fever, the subjective and objective signs and symptoms disappear. This stage is ordinarily preceded by copious diaphoresis. So perfect is the apyrexia, and so free is the patient from all signs of disease, local or general, that often both physician and patient have been lulled into a fatal security.

In some cases, however, the physical signs, though lessened in degree, persist, yet the inflammatory orgasm must have ceased in these instances, as no symptomatic fever or other inflammatory indications are present, and if the next paroxysm should be prevented, all morbid signs and symptoms rapidly disappear. Should another paroxysm, however, occur, the rational symptoms and physical signs also return, and usually in an aggravated degree. The consolidation extends, and, in some cases, both lungs become involved; the exacerbations increase in intensity and duration, and the intermissions become less marked, or, as more often the case, the disease assumes the remittent or

continued form, to be described hereafter. The cough becomes more frequent; the pain more intense; the dyspnœa increases; the patient becomes restless, and often delirium or coma closes the scene.

Diagnosis.—The diagnosis of this disease, when perfectly developed, is easily made. The three regularly recurring stages of chill, fever and apyrexia, and periodical pneumonic signs and symptoms clearly distinguish it from all other maladies.

Prognosis.—However perfect the intermission of the symptoms may be, this disease has always been considered as one attended with great danger. M. Cruveilhier cites the case of a physician who lost his own father from having mistaken the character of the disease, and the celebrated surgeon, Lisfranc, is said to have perished from the same error.*

I have myself seen four cases of this disease terminate fatally, owing to the fact that the physician did not recognize in time the nature of the malady. Death may occur in the second paroxysm, but it is usually postponed to the third or fourth access. In some few cases, I have known the remittent and continued forms of malarial pneumonia to assume the intermittent type. This is a favorable indication. Delirium and coma, occurring early in the disease, although grave symptoms, are sometimes present in cases which end favorably. They are very fatal indications when they supervene *late* in the course of the disease.

[TO BE CONTINUED.]

ART. II.—*Concentrated Vegetable Medicines.* By A. G. STALNAKER, M. D., Walton, West Virginia.

Concentrated tincture of Dioscorea, from *Dioscorea Villora*, commonly called Wild Yam, is as near a specific for bilious colic, cholera morbus, as any agent I have ever tried. In infantile colic, or intestinal irritation, one or two drops in a teaspoonful of milk, will relieve without constipating, and has never failed to give relief in my hands. The dose can be repeated as often as necessary.

Concentrated tincture of Stillingia, from *Stillingia Sylvatica*,

*Saillard, These de Paris, pp. 5-27. 1860.

commonly called Queen's Delight, as an alterative in syphilis, scrofula, or in any case demanding a positive agent, is invaluable. While physician on the Western Division of the Chesapeake and Ohio railroad, I treated successfully a large number of cases of syphilis, and the fact that they were principally negroes, who were not as cleanly as possible, is an additional proof of its curative power. The following prescription is my usual mode of giving it:

R. Concentrated tincture stillingia.....3j
 “ “ phytolacca.....
 “ “ podophyllum.....
 “ “ xanthoxylum, aa3ss
 Pure water.....3viij.

Mix. S: Teaspoonful twice a day. Apply strong solution of chloride of zinc to the sores. If there be much pain two grains of sulphate of morphia can be added to above. In cases of bone complication, I add one drachm of phosphate of iron, as I think it assists nature very materially in throwing off the old and in forming new bone.

Concentrated tincture of Phytolacca, from *Phytolacca Decandra*, commonly called poke root, is my next best vegetable alterative, and is very decided in its action. As a remedy in rheumatism, it has proven very efficacious. I sometimes use it in connection with concentrated tincture of xanthoxylum, in the proportion of six drops of the former to four of the latter, three times a day. If a liniment is indicated, I use chloroform and tincture of capsicum. Five drops of concentrated tincture of gelseminum at bedtime has proven very beneficial.

Concentrated tincture of Podophyllum, commonly called May-apple root, is too well known to require me to say more than that it should never be used alone, for when so given, it has a most griping, sickening, cathartic effect, but is thorough and definite in its action on the liver. I once took nine grains of pulverized podophyllum to test it, and am perfectly satisfied as to its power. In combination with concentrated tincture of leptandria and tincture of capsicum—one drop podophyllum, two drops leptandria and one drop capsicum—it will meet the most reasonable expectation of any practitioner. Its use is indicated in every case in which calomel is given, and owing to the pecu-

liar idiosyncrasy of some about taking calomel, the above combination is the best vegetable substitute.

Concentrated tincture of Hydrangea, commonly called Seven Bark, as a remedy for gravel, will, in a few years, be in every physician's office. In the treatment of cystitis, or any form of inflammation of the bladder, painful micturition, &c., it has been a great aid to me. In some cases I find great benefit when I use equal parts of concentrated tincture of populus with it. One beauty of these concentrated tinctures is, that they can be carried in a small space, are easily and quickly dissolved in the stomach, and they can be combined with most any other medicine.

Concentrated tincture of Veratrum, from *Veratrum Viride*, commonly called American hellebore, is a remedy not only of great value in fevers of all kinds, by controlling the frequency and force of the pulse, but it acts also on the secretions of the skin and kidneys. For an adult I add ten drops of the tincture to two ounces of water, and give a teaspoonful every hour as long as needed. It is an emetic in large doses, and not considered safe if used heroically. In the treatment of erysipelas, I desire particularly to call the attention of the profession to its action. In cases in which muriated tincture of iron and iodine have failed to relieve, the veratrum has always acted quickly and delightfully. Mix a teaspoonful in two ounces of water, and apply every two or three hours as the case demands. I have just relieved a patient who had been using sugar of lead, carbolic acid and iodine with ill effect. Of course you must expect a return of the disease until you get the blood purified by the use of alteratives, as I regard it as proceeding entirely from that cause. A few weeks ago, I was called in to see a child with scald head, or eczema might be more appropriate; I ordered the application as above described, and the next morning the baby's head had healed up very much. An incrustation formed and fell off, and the child got well. Its head and face was nearly one entire sore, and the little sufferer was very fretful.

Concentrated tincture of Hydrastis, from *Hydrastis Canadensis*, commonly called golden seal, or yellow puccoon, acts on the mucous surface most certainly, and its use cannot be mistaken. In leucorrhœa and ophthalmia I often use no other medicine,

though I frequently add twenty grains of sulphate of zinc to the drachm of hydrastis, and dilute to suit the exigencies of the case. I hope others will try this on any form of sore eyes and report to the *Monthly*. As a bitter tonic, in conjunction with pure whiskey it is very strengthening in weak conditions of the stomach. Last summer, while riding up Wills Creek, Kanawha county, a Mrs. Strickland asked me to come in and see her little child, stating that it "had lost the sight of one of its eyes, and the other one was very weak." The girl was apparently healthy otherwise, about 9 years old, and had not been able to see out of the eye for some months, and felt that the other eye was going likewise. Upon examination, I found a thin, clear, flimsy substance had grown over the entire ball, but the hydrastis and zinc took it off in a short time—three days, I believe—and the child is now blessed with good eyesight.

Concentrated tincture of Xanthoxylum, from *xanthoxylum fraxineum*, commonly called prickly ash, is a lasting stimulant, tonic and alterative. In rheumatism especially, whether chronic or acute, it is nearly certain to afford relief, and has even proven of value in the crude form, by adding two hands' full of bark to a pint of whiskey. In the concentrated state you know what doses you are giving, and can combine it with whiskey or any thing else and know what you are doing. Of all the remedies in the materia medica I prize this the most highly for rheumatism.

I wish to distinctly state that I have never found the same satisfaction from this class of drugs from any other house as that of Messrs. B. Keith & Co., of New York City, whose preparations I have used for the last ten years. I am well aware "antiquity has not spread her dusty mantle" over these remedies, but those who have only used the agents in a crude state can little appreciate the reliability of the concentrated tinctures. They might as well take a pint of rye and pour hot water over it and call it whiskey, as to use the crude substances and pronounce an opinion as to the medicinal virtues of these tinctures. I reiterate that, as domestic remedies, they have not proven of much utility, but as officinal medicines, they are of incalculable value.

ART. III.—*Periodicity of Fecundation.* By MARTIN P. SCOTT, M. D., late Professor of Diseases of Women and Children in Washington University; formerly Professor of Chemistry, Medical College of Virginia, etc., Baltimore, Md.

Hewitt (*Diseases of Women*, 2d Amer. ed., p. 19), speaking of the analogy of the œstrus in the lower orders of animals to menstruation in the human female, says: "But the woman differs from these animals in this respect, that she is capable of being impregnated, not at the time during which the discharge itself occurs only, but also *during the intervals between the periodic discharges.*" This opinion is, I believe, concurred in by most persons who have written upon this subject.

Is the human female an exception to the laws which regulate conception in the animal kingdom? The solution of this question involves, 1st. The periodicity of ovulation, and the preparation of the uterus for the reception of the germ. 2d. The viability of the male spermatozoa.

Can ovulation and the ovipont occur as the result of sexual orgasm during the act of coitus, like the secretion of the spermatogenic fluid? Is the uterus at all times ready for the reception of the fecundated germ? Hewitt (*l. c.*, p. 18) says it is probable that the act of congress often determines an ovipont which without it would be postponed for a time. Here the act of intercourse induces erection of the external generative organs and doubtless, also, that erection of the internal organs above alluded to—the result being the escape of an ovule. Again he says: "In the human female, the engorgement and full distension of the vessels (*i. e.*, of the internal generative organs) occur periodically—the period of engorgement being that of menstruation; while it would appear that it is liable—during the sexual life, at least—to occur also during intercourse."

Cui bono menstruation? What is the purpose of menstruation if ovulation and the ovipont take place as the result of the female orgasm at the time of sexual congress and fecundation the result?

We owe much of the light which has been shed upon the subject of the reproduction of the human species to the labors of the comparative anatomist and physiologist. They have explained the mode and manner of this process in the lower orders

of animals, and have enabled us to draw the most important deductions, and to understand the rules and laws necessary to its accomplishment in the human being.

There is a wonderful uniformity of construction of type in all animals, from the most inferior to man, who arrogates to himself the proud title of *Lord of Creation*.

As function depends on structure, we witness the same uniformity of type of function. So striking is the resemblance, so numerous the points of identity, that an imposing theory has been founded upon them to account for the origin of man, whose place has been awarded as the summit of the pyramid of the animal kingdom—not a being apart, a separate creation, but evolved and developed in the course of ages, in obedience to certain laws of creation, from the lowest orders of animals or protoplasm !

In no set of organs or apparatus or system is this uniformity of construction and of function more striking than in the generative apparatus of animals. The vegetable kingdom affords many points of resemblance.

In all animals there is a germ producing organ—an organ whose function it is to develop and mature a germ to be fecundated by the male cell or fructifying principle.

In the human female, and in a large number of animals, there is an organ for the reception of the germ, where it is nourished, in which it is developed, and from which it is expelled when capable of independent life. Thus we find a germ-producing and a germ-nourishing organ—an *ovarium* and an *uterus*.

These form conditions necessary to reproduction in the human female and many of the lower animals. In all it is a law of organization that there must be a germ-producing organ.

In all animals, that reproduction may take place, it is necessary that the *vitalizing principle of the male* shall come in actual contact with the *female germ*. Fructification ensues, and a new being results, to be developed and fashioned after its kind, after the type of the parents.

In all females of the lower orders, there are *periodical* seasons for the development and maturation of germs, at which periods *alone* they are capable of impregnation. In the vegetable kingdom we find the two sexes, the male and female plant, the latter producing a germ, the former a vitalizing principle—the contact

of the two being necessary to fructification. Thus, even in the vegetable, we find this wonderful uniformity of construction of type, and of function, and of process of fecundation, analogous to those of the animal creation. Observation of this process in plants, and in the lower orders of animals, has furnished most important facts to enable us to explain the same phenomena in the human female. The pollen of the male must be conveyed to the ovarium of the female plant; sometimes this is done by the winds; sometimes it floats upon streams, whose eddies bring it in contact with the female germ; in other instances bees and insects, going from flower to flower, bring the two principles together, and fructification is the result. If the germ be examined before fertilization, it will be found to consist only of starchy substances. Subsequent to it, curious and wonderful chemical changes ensue, and under the combined influence of heat and moisture, a new creation is developed into existence. The growth of fungus plants has, under the microscope, been shown to be carried on upon the same principle of law, or of necessary contact. The formation of the germ-producing organ exhibited a corresponding growth of the male organ, and its insertion into the ovarium witnessed, resulting in reproduction.

Thus has the observation of the process of reproduction in the vegetable kingdom demonstrated (1st) the necessity of organs for the development and maturation of female germs; and (2dly) that in order to fecundation, contact is necessary between the vitalizing principle of the *male* and the germ of the *female*.

In like manner has it been shown that the same is true of the lower animal creation; the manner differs; the structure of the organs varies; but the physiological law is the same.

In different animal creations we find varieties of structure, but all fashioned and suited to the same end, and the great law observed in all, of necessary contact. This fact has been shown by observation upon the fecundation of the germs of fish, which is almost as free as the seed of the plant. The female deposits her eggs, and the male, guided by unerring instinct, finds them and ejects the fertilizing principle pertaining to his sex upon them, both leaving them afterwards to chance. The chub fish makes her nest, and both guard the nest and protect the young; they will not take the bait at this time.

In the higher types of animals, fecundation is not so easily effected, but throughout all nature the essential principle is the same—the female furnishes the germ, the egg. In some, as the honey bee, a single connection of the male with the female, the queen bee, is sufficient for the production of many broods, or swarms. The fertilizing principle retains for a length of time where it is deposited its vitality, or its power of fertilization; and the successive crops of eggs as they are laid pass and come in contact with it, and are fertilized. The queen bee is the only one that lays eggs, but is not the only female of the hive, as the workers are females; for if any accident should happen to the queen, and no new queen cell be made, some one of the workers will be impregnated by the drones (the male bees), and thus the colony be perpetuated.

A curious fact is related of certain of the insect tribe, which at first might be regarded as an exception to the law of necessary contact. It is that after impregnation and the deposit of the eggs, the females hatched out are capable of laying eggs which in turn will hatch out without the female having had connection with the male, and this will continue for several generations. But this is only a seeming exception; for after a certain number of generations, a new and fresh impregnation becomes necessary; so that each new brood must have retained in the embryotic state a certain quantity of the original fertilizing principle, which, until exhausted, was capable of fertilizing the next batch of eggs.

What has been demonstrated to be true of plants and the lower orders of animals, is likewise so of the human creation. The female furnishes the germ, the egg, the man the spermatic fluid, which contains the vitalizing principle—the contact of the two being necessary to fecundation. The germ, the ovum, the egg is prepared in an appropriate organ, the ovary, from which it is secreted and passes by an appropriate channel to the germ nourishing organ, the uterus; and if fecundation is retained, where the process of development and growth is effected, to be expelled from the body of the parent when capable of independent existence.

In females of all the lower orders of animals, the germ or ovum is secreted or matured at *periodical* intervals, and it is at

these periods alone that they are capable of conception. Is the human female an exception or the highest exemplification of the universality of this law of nature, the *periodicity* of the production of germs? In the vegetable kingdom there is a season for germination. In the spring time, under the influence of heat and moisture, the sap begins to ascend, the leaves put forth, and the bloom or blossom appears. This is the period for the production of germs, which, if fertilized, results in fructification. Some plants bloom only once during the year, some twice, spring time and fall, whilst others are monthly germinating plants.

The same facts are demonstrated of the inferior orders of animals. At the appropriate season the fish discharges her eggs upon the waters, trusting they may be found and fecundated by the male; the domestic hen at *stated* intervals prepares a batch of eggs, which, when sufficiently matured, she "lays," whether they *are* or *not* fecundated by the *cock*. In like manner, the ovaries of the human female, at her regular periods of four weeks, take on action and discharge one or more eggs—if a virgin, not to be fecundated; if in the habit of sexual intercourse, to be or not fecundated as other circumstances may determine.

The process of menstruation is the laying of a human egg, differing little in its general characteristics, on its first appearance, from the egg of a bird or other animal. This periodicity of ovulation is witnessed in many of our domestic animals, and is known as the season of heat or the rutting season. Thus the cow goes in heat every month—every 28 days—her period of gestation being 40 weeks, or 9 months.

It is singular that the error should be made by writers on this subject that the cow and the mare go in heat only once a year. I have been able to satisfy myself, from observation, that the cow has *monthly* periods of heat, when alone she is capable of impregnation, and when alone she will take the bull. She remains in heat but a short time, varying in different individuals, some a day or two, others only a few hours. Cattle breeders are aware of these facts, and hence allow the bull to remain always with the herd of cows.

The exact periods with the mare I have not been able to ascertain with certainty, but I am satisfied of its regular periodicity, which certainly occurs oftener than once during the year.

Exactly nine days after the colt is born, the mother will take the stallion; if this period be allowed to pass, she will not receive his caresses for a period, I believe, of five weeks—some have told me six weeks; others seem to think that the period is nine days. The periods are short and regular. These are her periods of ovulation, of menstruation. As a general rule, after conception she will not take the stallion, but often she will, whenever he offers himself. If she does not conceive, she will, at each menstrual period, submit to the act. All are aware of the striking analogies presented by the human female to those just enumerated.

The bitch will go in heat once every 4 or 5 months. She remains in heat exactly nine days. At these periods alone does she ovulate, and is she capable of conception. The same facts are true of the hog, the sheep, the cat, &c. *Periodicity is the law* of ovulation in them all. Each kind has a special interval of repose, of menstruation or ovulation, and of gestation.

Order is the first law of nature, and the order of nature is *not* suspended in the case of the human female. She has her periods of ovulation, and it is at these periods *alone* that she is capable of conception—that she is capable of assisting in her great work of the reproduction of the human species.

These facts or opinions are strengthened, if not demonstrated, by observation of the phenomena which accompany the seasons of heat in the lower animals, and a comparison with those of menstruation in woman. In animals (as the bitch) there is more or less tumefaction of the external genitalia, which is due to the tide of blood which sets to these organs, causing congestion of all the organs of generation—of her ovaries, of the uterus, of the vagina, of the external genitalia; there is increase of heat in the parts. At this time alone will she allow the caresses of the opposite sex, and at this period alone is she capable of conception—of fecundation—because at this period *alone* is there ovulation, and a corresponding preparation of the uterus for the reception of the fecundated ova. There is also a muco-sanguinous discharge from the vagina. These phenomena take place in a greater or less degree in all animals.

Now, what are the phenomena of menstruation? What is menstruation? It is *ovulation*, accompanied by a certain con-

dition of the organs of generation, presenting certain phenomena. It is an act in which the whole genital apparatus sympathizes, if not the entire constitution. The uterus is now prepared for the reception of the germ. There is turgescence of the external genitalia, congestion of the vagina, of the ovaries, erection of these organs. A tide of blood sets to these organs; one or more ova are developed; congestion of the uterus supervenes, resulting in the rupture of some of its capillary vessels; a discharge of blood, which becomes mixed with mucous and glandular albuminous secretion. The ovisac is ruptured; the ovum escapes into the Fallopian tube, which conveys it to the uterus, which is now, the menstrual flow having ceased, ready to receive it. This transit, according to Pouchet, is accomplished in from two to six days; according to others from two to twelve days. Whatever be the period of its transit, it is at this time *alone* that woman is capable of impregnation. Every 28 days periodically, the same phenomena of ovulation and menstruation occur, the same condition of susceptibility of conception—and this in all women who have arrived at the age of puberty, whether the virgin or married.

But ovulation is not the only act necessary on the part of a woman to conception and reproduction. The uterus must be prepared for the reception of the embryo; the decidua must be formed; the mucous membrane of the uterus must be developed, thickened or exfoliated, or the fibro-albuminous membrane formed from the uterus. The blood and mucous effused at the mensural periods is merely a consequence of the uterine changes, is merely a symptom (which does not always take place) of the preparation of the uterus for the reception of the embryo.

It follows, therefore, that in order that fecundation shall occur, it must be preceded by the act of menstruation; and further, that if fecundation may occur whenever intercourse is had with a man, that this act must cause menstruation—that she is an exception to the law of periodicity of menstruation, which we know she is not.

But it is the opinion of some that the fertilizing cells or germs of the male are capable of living for a length of time after secretion, that they make their way into the uterus and lie there *perdû* an indefinite length of time, until menstruation occurs.

I cannot but reject this hypothesis, because we know how readily their vitality is destroyed, and that the viscosity of the mucous plug would afford a mechanical impediment to their upward passage. Moreover, conception does not take place in the uterus. But once admit the hypothesis, and there is an end of argument.

From an attentive consideration of all the phenomena of menstruation, I cannot withhold the belief that the only time at which a woman is capable of fecundation is at her periods of ovulation, within a period of from two to ten days after the cessation of the menstrual flow. The analogy of all other animals goes far to establish this fact. In the lower animals there is no question that the ovulation is periodical, and that at this period alone is she capable of conception. With the human female we establish the fact of the monthly periodicity of ovulation: that ovulation is accompanied by the phenomena already detailed, is, in fact the cause of them; and it does seem to me that the conclusion must follow that this is *alone the time of conception*.

Churchill's tables of the duration of gestation strengthen this opinion, wherein he shows that the time of conception to have been shortly after menstruation. It does seem to me that if our physiological views of the processes of generation and menstruation be correct, that my opinion of the time of conception must also be true. Yet, you will find the most accepted authorities stating that conception is, after all, one of the most capricious acts of nature; that a woman is most liable to conceive a few days before menstruation and a few days after that act, but may conceive at any period. It is needless to repeat that I cannot accord with such view, which is contrary to the received physiology of generation.

This opinion is more in accordance with that formerly entertained, viz.: that the ovum is discharged at the time of sexual intercourse, and at that time only; that ovulation is the result of female orgasm in the same manner as the seminal fluid is the result of male orgasm.

The uniformity of construction of type, and similarity, if not identity, of function of the generative organs of the human female with those of many of the lower animals, is illustrated by reference to the mode of origin and the early stages of the development of man, and a comparison with the animals immedi-

ately below him in the scale, for the progress of knowledge is due to *analogy*! A distinguished physiologist has so clearly set forth the facts relating to this subject that I may be pardoned if I make the quotation in full, and in his own clear and forcible language:

“Every living creature commences his existence under a form different from and simpler than that which it eventually attains: the oak is more complex than the acorn, the caterpillar than the egg, the butterfly than the caterpillar. This series of changes is called development! In the dog, for example, the egg is a spheroidal bag formed of a delicate membrane called the viteline membrane, $\frac{1}{130}$ th to $\frac{1}{120}$ th of an inch in diameter, and contains a mass of viscid nutritive matter, ‘yelk,’ within which is enclosed a second much more delicate spheroidal bag, the germinal vesicle. In this lies a more solid, rounded body, termed the ‘germinal spot.’ The egg or ovum is originally formed within a gland from which, in due season, it becomes detached and passes into a living chamber fitted for its protection and maintenance during the protracted process of gestation. Here subjected to the required conditions, the living matter becomes animated by a new and mysterious activity. The germinal vesicle and spot cease to be discernible (their precise fate being one of the yet unsolved problems of embryology), but the yelk becomes circumferentially indented, as if an invisible knife had been drawn around it, and thus appears divided into two hemispheres. These hemispheres become subdivided into four segments; these divide and subdivide until the whole yelk is converted into a mass of granules, each of which consists of a minute spheroid of yelk substance enclosing a central particle, the so-called *nucleus*.

“Nature, like a bricklayer, takes the rough and plastic material of the yelk, breaks it up into well-shaped, tolerably even-sized masses, handy for building up into any part of the living edifice. These masses are called ‘cells’; these acquire an orderly arrangement, becoming converted into a hollow spheroid with double walls. Then, upon one side of this spheroid appears a thickening; a straight, hollow groove marks the central line of the body of the future ‘dog.’ The substance bounding the groove on each side next rises up into a fold, the rudiment of the side wall of that long cavity which will eventually lodge the spinal marrow and brain, and in the floor of this chamber appears a solid cellular cord, the so-called ‘nolochord.’ One end of the enclosed cavity dilates to form the head; the other remains narrow, and eventually becomes the tail. The side walls of the body are fashioned out of the downward continuation of the walls

of the groove, and from them, by and by, grow out little buds, which by degrees assume the shape of limbs. Every part, every organ is at first pinched up rudely and sketched out in the rough, then shaped out more and more accurately, and at last receives the touches which stamp its final character 'after the fashion of the modeler in clay.'

"The remains of the yelk which have not yet been applied to the nutrition and growth of the young animal are contained in a sac or attached to the rudimentary intestine, and termed the yelk sac or 'umbilical vesicle.'

"Two membranous bags, intended to subserve, respectively, the protection and nutrition of the young creature, have been developed from the skin and from the under and hinder surface of the body. The former, the so-called *amnion*, is a sac filled with fluid which invests the whole body of the embryo, and plays the part of water-bed for it; the other, termed the *allantois*, grows out loaded with blood vessels from the ventral region, and eventually, applying itself to the walls of the cavity in which the developing organ is contained, enables these vessels to become the channel by which the stream of nutriment required to supply the wants of the offspring is furnished to it by the parent!

"The structure which is developed by the interlacement of the vessels of the offspring with those of the parent, and by means of which the former is enabled to receive nourishment and to get rid of effete matters, is termed the *placenta*.

"There is not much apparent resemblance between a barn-door fowl and a dog; nevertheless, the student of development finds not only that the chick commenced his existence as an egg *primarily identical* in all essential respects with that of the dog, but that the yelk of this egg undergoes division, that the formation groove arises, and that the contiguous parts of the germ are fashioned by precisely similar methods with a young chick, which at one stage of its existence is so like the nascent dog that ordinary inspection would hardly distinguish the two.

"The history of any other vertebrate animal tells the same story—always to begin with the egg; having the same essential structure as that of the dog, the yelk of that egg always undergoes division—*segmentation*, as it is called.

"The ultimate products of that segmentation constitute the building materials of the body of the young animal, and this is built up around a primitive groove, in the floor of which a nolo-chord is developed.

"Furthermore, there is a period in which the young of all resemble one another, not merely in outward form, but in all essentials of structure, so closely that the differences between them are

inconsiderable, while in their subsequent course they diverge more and more widely from one another. The various families resemble one another longer in embryo than those of different families.

“What of man? Is he something apart? or does he originate in a similar germ, and pass through the same processes of development? Does man depend on the same contrivances for protection and nutrition, and finally enter the world by the help of the same mechanism? The reply is not doubtful for a moment, and has not been doubtful any time these thirty years. Without question, the mode of origin and the early stages of development of man are *identical* with those of the animals immediately below him in the scale! Without a doubt, in these respects he is far nearer the apes than the apes are to the dog.”

Thus is the uniformity, if not identity, of the mode of origin of man with the animals immediately below him in the scale demonstrated—

1st. In both there is a germ-producing organ, and a germ-nourishing organ, and a germ-conducting organ.

2d. A similar passage for the products of conception when capable of independent life.

3d. The same contrivance for his nourishment “*in utero*” and after birth.

4th. In both the mode of fecundation is the *same*.

5th. In both the *contact* of the male fertilizing principle with the female germ or ovum is necessary.

6th. Even in the vegetable kingdom the same general laws of fructification obtains.

7th. In the vegetable kingdom there is a season for the preparation of germs, at which periods *alone* fructification can be effected.

8th. In animals below man in the scale the same law of periodicity of germination is observed—periods of ovulation or menstruation, at which periods *alone* they are capable of *impregnation*.

9th. In the human female we demonstrate this identity of function, viz., periodicity of germination or ovulation, or *menstruation*; and it must follow that it is at these periods *alone* that the human female is capable of fecundation; that she is not an exception, but the highest exemplification of the great physiological law which regulates generation in all animated nature—the periodicity of ovulation and fecundation!

But it may be said that cases have been reported, and substantiated as far as human testimony can, of women having been impregnated as a consequence of coitus just before the appearance of the mensual flow. Setting aside the uncertainty which must always attend such statistics, I answer that these cases do not disprove the law of periodicity of fecundation. The appearance of the menstrual fluid is only an evidence of the activity of the ovaries, and is the result of the uterine phenomena which are going on—the preparation of the uterus for the reception of the germ. Before the mensual flow, ovulation begins; the organs are congested, are in an erectile state; so is the oviduct, a condition necessary to the ovipont. If, now, intercourse be had, the spermatic fluid may reach the ovum (the mucous plug having been discharged—the first *sign* of menstruation, as of parturition), contact takes place, resulting in impregnation. Shortly afterwards comes on the sanguineous flow, no other act of congress being enacted; and we exclaim, a woman is an exception to the law of periodicity!

In fact, such cases are examples of her law, not exceptions, ovulation having begun before the uterine sign appears. There is nothing in such cases contrary to law; nothing exceptional, except to the minds of those who define menstruation to be the periodical discharge of sanguineous, mucous, albuminous fluid every 28 days from the uterus. Such persons mistake a sign for the conditions which cause it—an effect for a cause.

The decidua are always destroyed from the 10th to the 12th day after menstruation (Pouchet). After this conception cannot take place.

These views are strengthened by reference to the sterile condition of women the subject of morbid menstruation. The form of dysmenorrhœa known as membranous causes sterility, which is easily explained upon the theory of periodicity of conception, because one of the necessary conditions is always absent, viz., the preparation of the uterus for the reception of the germ; or this morbid state of the uterus may possibly interfere with physiological or healthy ovulation, which, we know, often results from diseases of the uterus. But, if conception can take place at any period of *sexual* life, irrespective of the periods of menstruation, there is no reason why membranous dysmenorrhœa should be a

cause of sterility, which we know, however, it invariably produces. Ovarian dysmenorrhœa is likewise a cause of sterility, both on account of difficult ovulation and the hyper-congestion of the uterus thereby induced. In such cases the dysmenorrhœa is periodical, at the periods of menstruation *alone*, which would not be the case if ovulation occurs during the intervals, or as the result of sexual congress.

The sudden suppression of the mensual discharge causes a sterile condition; nor will fecundation be possible until the function has been restored as to periodicity, duration and quantity of effused fluid. If ovulation be the result of female orgasm, there is no reason why fecundation should not take place in this class of amenorrhœal persons. And lastly, we observe that all diseases which cause sterility produce morbid menstruation of some kind, demonstrating the relation of the two functions, the absolute dependence of fecundation upon healthy menstruation, which is *periodical*.

Clinical Reports.

A Case of Ovariectomy—Successful. By JAMES D. MONCURE, M., D., Medical Superintendent of Church Institute, Richmond, Va.

Mrs. C., aged 45, first observed a small tumor occupying the left iliac region, about six years ago—about three months after the birth of her ninth and last child. She had had disease of the womb for many years; for the last two years she had menstruated once every other week, the flow continuing eight days each time.

On the 23d of October, 1875, accompanied by Dr. R. J. Hicks, of North Carolina, I drove out to see her. On examination, we found a large tumor of the left ovary, extending up to the ribs. The uterus was normal, moveable; fluctuation distinct over the tumor, which could be easily displaced. Not having adhesions, it had grown very rapidly during the preceding six months, and it now impeded respiration, as well as the circulation in the lower extremities by its weight.

Mrs. C., having decided to have the operation performed, was

admitted into the Church Institute on the 25th day of October. The following day her bowels were evacuated by a dose of oil; but finding them still disturbed, on the 27th I gave an enema. At 12 o'clock, as Mrs. C. was a very nervous, excitable woman, I gave her an enema of chloral hydrat., ʒj, a very efficacious remedy under such circumstances (first pointed out to me by Dr. I. H. White) to lessen the rigid stage during the use of anæsthetics, and which I regard as especially indicated whenever it becomes necessary to produce anæsthesia in habitual drunkards, as they are the least favorable cases to bring under the influence of chloroform.

Twenty minutes afterwards, Dr. W. F. Barr, of Abingdon, Va., put her under the influence of ether sulph., and the patient was removed to the table. The operation was performed in the presence of Drs. Hicks, of North Carolina, Barr, of Abingdon, Va., I. H. White, F. D. Cunningham, M. M. Walker, and several others of Richmond, Va.

A small exploratory incision was carefully made through the linea alba about half way between the umbilicus and the pubis, first dividing the skin to the extent of an inch and a half; then scratching through the fibrous structures of the linea alba, the peritoneum was exposed and divided on a director to the size of the internal wound, and the tumor was brought into view. The mass presented the usual character of an ovarian tumor. The incision was now enlarged to about three inches, and a sound was passed over the anterior surface of the tumor, when two slight adhesions were discovered over the region of the spleen, and broken up. The cyst was now evacuated by plunging Mr. T. S. Wells' trocar into it, causing the escape from the first cyst of a grumous, brown fluid, and from the second a clear, limpid fluid—the latter being opened as usual, by passing the trocar through the wall of the dividing septum. There were no posterior adhesions, and the tumor was drawn through the abdominal incision, leaving a pedicle about an inch and a half wide. To this pedicle Atlee's clamp was applied and the tumor excised. The right ovary was found to be normal. Deep sutures of silver wire, bringing the peritoneal surfaces together, were now applied, the patient well bandaged and removed to her bed. Reaction soon took place, the patient suffering with intense headache.

October 28th, 9 A. M.—Headache worse; pulse 100; temperature 100°F.; no nausea or tenderness; diet, milk and lime water.

October 29th, 5 A. M.—Pulse 110; temperature 102°; headache very severe—no other pain; slight tympanites; at 12 M., pulse 105, temperature 101°; at 6 P. M., pulse 102, temperature 99½°; very restless. Gave her an enema—R. chloral hydrat., gr. xl, tinct. opii, gtt. xx; M.

October 30th.—Rested well; had an action from the bowels; less headache. 6 A. M. Pulse 106, temperature 101°; at 12 M., pulse 108, temperature 101.5°; at 6 P. M., pulse 110, temperature 102°. Headache again worse; applied mustard to the temples and sprinkled with morphine.

October 31st, 6 A. M.—Pulse 110, temperature 100.5°, headache improved; at 12 M., pulse 106, temperature 101°; at 6 P. M., pulse 100, temperature 101.5°.

November 1st.—Pulse 86, temperature 98.5°; no headache.

On the 11th day the clamp came away, leaving the wound above the pedicle adherent. On the 12th the stitches were removed; on the 21st day the patient sat up, the wound well, except a part just over the pedicle about the size of a grain of corn.

The patient still continues well, March 20th, 1876, but has not menstruated since the operation. The tumor weighed 6 pounds, the fluid 22½ pounds.

Sloughing of the Inferior Segment of Both Corneas, in a Child, from a Physical Cause. By WM. H. BRAMBLETT, M. D., Newberne, Va.

January 7th, 1876, I was called to see a child, æt. 21 months, suffering from diarrhoea and vomiting. During July and August of last year he had cholera infantum, from the prostrating effects of which he had not entirely recovered up to the time of his present attack. Nothing was retained on his stomach more than a few moments, and his stools were very frequent and watery. He had vomited several stomach worms, and was very much prostrated—having been sick only twelve hours. The following was directed:

R. Pulv. opii..... .gr. ij
 Santonin..... .gr. xij
 Hydrarg. chlorid. mit..... .gr. vj

M. Divide into chart No. xij. S: To be taken, one every two hours. Nothing in the way of nourishment or drink was allowed, except a teaspoonful of ice or ice-water every 15 or 20 minutes.

I saw the little patient again on the morning of the 8th. The vomiting had ceased during the night; the stools had become more consistent, and several worms had been passed, but he was very much prostrated—lying with his eyes half closed, noticing nothing, except when aroused to take ice or water. I directed lime-water and milk with whiskey every hour, and the powders to be continued. The milk and lime-water, as well as the whiskey, in the form of cream-toddy, he took with avidity.

The next morning, although he had taken and retained the nourishment and stimulants, his condition was not at all improved. He was unconscious, except when aroused to take nourishment or stimulants, which he still took well; his eyes half closed, exposing the lower segment of the corneas, which by this time presented a dried and faceted appearance. He had vomited two or three worms and passed several from the bowels, though the nourishment and stimulants were mostly retained. The pulse was 140 per minute, and feeble. I discontinued the powders and increased the stimulant to half a teaspoonful every hour.

The next morning (January 10th) I found him almost pulseless. I gave him half-teaspoonful doses of stimulants every 15 minutes, and applied mustard to the extremities and stomach. In two or three hours reaction was established, and the stimulant, with nourishment, were directed every hour. The lower portion of each cornea was dryer than on the morning previous, but I did not do anything for them, as the condition of the patient appeared hopeless.

He took his stimulants and nourishment well through the night, and the next morning (11th) I thought his condition better. When light was let into the room, he would close his eyes and bury his face in the pillow. He had had several motions from the bowels since my visit on the day previous, and voided worms each time. The stimulants, with nourishment, were continued every hour.

On the morning of the 12th, the lower segment of each cornea was coated over with what appeared to be a fibrinous exudation,

or, perhaps more properly, effusion. The photophobia was now intense, and it was with much difficulty that a view of the eyes could be had at all. Vessels could now be seen passing into the cornea all around the periphery of its lower border. The instillation of atropine, gr. j to water ʒj, three times a day, was directed, and quinine and Dover's powders three times a day. The general condition of the patient continued to improve. The fibrinous masses above alluded to exfoliated every two or three days, leaving a distinctly marked ulcer, in which loss of tissue was evident.

On the sixth day, dating from the time of commencing convalescence, a part of the aqueous humor of the right eye was discharged through the ulcer. The general health of the patient continued to improve, and in two weeks could bear some light upon the eyes. In four weeks from the commencement of the illness the ulcers had entirely cicatrized, with a large leucoma occupying the lower segment of each cornea, and in the centre of that of the right eye was a dark spot—synechia anterior—in which the iris was engaged in the cicatrix. Vision appeared to be good in the right eye; in the left it was perfect. The leucomas do not extend up over the pupils, but merely to their lower borders.

Not having, in my reading, met with an allusion to an accident of this kind, I think the report of this case will be of value to the profession, as I believe such cases are not altogether infrequent.

Having devoted some special attention to diseases and accidents of the eye, in my practice, I have several times met with leucomas of the lower segment of the cornea in both eyes—the upper segment presenting no evidence of disease—which I could not account for. The parties having such eyes would tell me they had sore eyes when a child. These cases I now, since the case above reported came to my knowledge, believe to have resulted from a like cause, namely: a prostrating disease in childhood, in which the lower segment of the cornea was long exposed to the drying atmosphere of the sick room.

Should I meet with another case of the kind, I will guard against the recurrence of a like accident, by keeping the corneas moistened with new milk or annointed with olive oil.

Case of Dystocia, Presenting some Anomalous Symptoms. By GEO. ROSS, M. D., Lecturer on Surgery, Medical College of Virginia, &c., Richmond, Va.

Mrs. L. M., white, æt. 22 years, short of stature, very stout and healthy, pregnant with her first child, had threatenings of incipient labor on the night of November 9th, 1875. Her entire period of gestation had been one of unexceptionable health. I saw her repeatedly during the day on the 10th and 11th, and remained with her almost constantly from the night of the 11th until her delivery on Sunday morning, the 14th. During this interval her general condition was satisfactory, marred only by a rigid and undilatable os uteri.

On the evening of the 13th, the os became fairly dilated, revealing the child presenting at the superior strait in the first vertex position. Her pains were now of normal character, but intensified in violence during the early part of the night, and fruitlessly endeavored to force the head to "engage." The patient, being much wearied by her protracted sufferings, and very anxious, exhibiting some premonitory threatenings of exhaustion, I determined to apply the forceps, and invited Dr. J. G. Skelton to meet me in consultation. He complied promptly at 11½ o'clock P. M., and on examination confirmed my diagnosis, and agreed with me as to the importance of early delivery. The "pains" were now strong and enduring, and ought, with so capacious a pelvis as this patient possessed, easily have forced the head into the cavity. But such was not the case, and for the following reason, to-wit: that the uterus lay in an *oblique* position from right to left, so that each pain, instead of acting in the line of the axis of the superior strait, forced the vertex over against the crest of the left ilium, thus doubling the child on itself, and producing the impression of a *twin labor*—one child seeming to occupy the right hypochondriac, and the other the left iliac region, a sulcus or groove along the median line between them, as deep as the thickness of a man's forearm. Every possible effort by conjoined manipulation to correct this obliquity was unsuccessfully made. No waters had escaped, and no membranous pouch presented.

As soon as the bladder and bowels could be emptied, and chloroform administered, the patient was placed in the proper posi-

tion for instrumental delivery, and I endeavored to apply the long forceps above the superior strait. I made careful and diligent effort, using two different kinds of forceps, and failed. Dr. Skelton, who is recognized, and justly, as one of the most skillful and accomplished accoucheurs and physicians in our midst, took my place, and with all the gentleness and patience for which he is so rightly trusted and admired, faithfully worked to adjust and lock the instruments, and failed, and had to abandon the effort. Pending all this necessary manipulation, the patient was kept sufficiently anæsthetized to be free from all pain and consciousness of the steps pursued to accomplish her relief.

Symptoms now arising making the prospect of exhaustion still more imminent, and the child being already dead, we decided to practise embryulcia. I had no difficulty in piercing the cranium at the posterior fontanelle, and in removing portions of the adjacent occipital and parietal bones, and breaking up and removing portions of the brain substance; but, contrary to my usual experience, no collapse of the skull took place, and though both Dr. Skelton and I used all the force we deemed safe or expedient, by seizing the occiput with "Meigs' pliers," and making traction during the "pains" to flex the head, we still were foiled. Then, too, as we tore away portions of the skull, carefully avoiding to remove any of the scalp, the mouth of the uterus seemed again to *contract* over the head, and thus we were in constant danger of wounding the intra-vaginal cervix, as well as being more and more limited in the space through which we had to operate. With this additional complication becoming momentarily more and more complicated, ourselves exhausted from prolonged work and mental anxiety (I had not taken off my clothes for three days and nights, and scarcely slept at all), and the patient's condition growing yet more alarming, we asked for additional counsel, in the persons of Dr. Robert T. Coleman, Professor of Obstetrics, and Dr. F. D. Cunningham, Professor of Anatomy, Medical College of Virginia. When I explained to them the difficulties of the case, they examined for themselves, and Dr. Coleman promptly lent the needed fearless helping hand, succeeding in fixing the crotchet above (relatively) the occipital protuberance, forcing flexion, and delivering a very large male child.

Absolute inertia of the womb supervened during this final struggle, the organ became large and flabby, filling up the entire abdominal cavity, and immediately on the withdrawal of the child and placenta, a furious *post partum* hæmorrhage followed. To introduce my hand into the uterine cavity, to knead the organ externally and internally, to make forcible pressure from above downwards, to fill the cavity with large lumps of ice and give maximum doses of whiskey and ergot, was but the work of a few moments, and I had the intense satisfaction of seeing my patient snatched, as it seemed, almost from the very jaws of death. Of course she was exhausted, cold, exsanguine, and with the feeblest possible pulse, beating 120 per minute. As quickly as possible she was made comfortable in bed, absolute quiet of mind and body enjoined, and fifty minims of McMunn's elixir opium directed to be administered every 4 hours. At my afternoon visit she was resting easily under the influence of the opiate; had a tympanitic abdomen, and had passed no urine; her pulse and temperature were not noted.

Nov. 15, 10 A. M. Pulse 130; temperature 102.0°F.; is very feeble, but free from pain; belly tympanitic; tongue coated; some nausea; has not urinated. *Treatment.*—Catheterized, removing 3 pints of dark urine. To take 3 doses of elixir of opium during the day. Diet to be milk and ice only. *Evening, 8½ o'clock.* Pulse 120, and stronger; temperature 101.2°. Belly very tympanitic, with some soreness. Has had constant acid stomach, with nausea and vomiting. *Treatment.*—Catheterized. Sinapism to epigastrium. Lime water and milk and elix. opium. Antiseptic (3j carbolic acid to Oj tepid water). Vaginal douche night and morning.

Nov. 16, 10 A. M. Temperature 102°; pulse 120, and weak. Tongue coated; no nausea or vomiting since last night; belly less tympanitic, but painful on pressure; has had several large, intolerably fetid muco-bloody discharges from bowels during the night. I suspect recto-vaginal rupture. Slept well under elix. opii. *Treatment.*—Catheterized, removing about three pints of dark, ammoniacal urine. Continue directions of yesterday, adding 20 minims extract secale cornut. fluid every 2 hours. 9 *P. M.* Temperature 102°; pulse 105. Condition unchanged, save slightly increased abdominal tenderness, with some ten-

dency to mammary engorgement. Has had 8 or 9 *hæmorrhagic* discharges from bowels during the day. *Treatment*.—Catheterized; internal medications unchanged. To have enema of ʒj extract secale cornut. fluid and 10 minims acid. carbol. in solution.

Nov. 17, 10½ A. M. Temperature 100.¾; pulse 104. Has scarcely slept at all. Tongue shows some tendency to clean at tips and edges. Is less tympanitic, but more soreness, especially over left iliac region. Has had several painful, dreadfully effusive *hæmorrhagic* discharges from bowels during the night. Has taken 3 doses of elixir opii and 3 enemata of ergot and carbol. acid since evening's visit. *Treatment*.—Catheterized. Give at once castor oil ʒss, then every alternate 2 hours 20 grains hyposulphit. soda, and 5 grains sulph. quin., and 30 minims elixir of opium. Apply hot hop poultice to bowels; support the breasts, and envelope them in camphor cloths. Diet: milk, ice and lime water. 8½ P. M. Temperature 100.4; pulse 102. Has rested comfortably. No nausea, but some gastric burning. Had six evacuations of same character, with less blood. Treatment continued.

Nov. 18, 10½ A. M. Temperature 100; pulse 96. Feels better; rested well; less tympanitis and abdominal soreness. Had two alvine discharges, natural and painless. *Treatment*.—Reduce dose elixir opii to 15 minims instead of 30 minims. Diet: chicken soup, milk, soft egg. 8½ P. M. Temperature 100; pulse 100. Rested comfortably all day; abdomen soft and painless under pressure; had 3 operations without blood. *Treatment*.—Catheterized; fifty minims elixir of opium at bedtime.

Nov. 19, 10 A. M. Temperature 100; pulse 100. Slept well; had 3 alvine evacuations; enjoyed tea, cracker and egg for breakfast, but has had some nausea and heaviness about the stomach since. *Treatment*.—Reduce doses of hyposulphit. sod., sulph. quin. and elixir opii to 3 times daily; rectal douche of carbol. acid to once daily; and if actions are frequent or painful, then add to it 25 minims tinct. opii in thin starch water. Diet unchanged. 9 P. M. Temperature 101; pulse 100. Vomited once to-day; abdomen soft, but some tenderness over hypogastric and left iliac fossa; had 5 evacuations, shaped and pain-

less. Treatment continued, giving 40 minims elixir opii at bedtime.

Nov. 20, 10 A. M. Temperature $100.\frac{3}{4}$; pulse 109. Did not sleep; feels more feverish; has a good deal of nausea; vomited once; had 4 actions during the night—all shaped, except the last; abdominal tenderness somewhat increased; no rectal or vaginal discharge; breasts are soft and painless; has had no milk; tongue almost clean. *Treatment*.—Diet unchanged; continue hop poultice to abdomen. P. M. Temperature 101; pulse 100. Tolerably comfortable all day; tongue clean; no nausea; less thirst; 4 operations, with some soreness still lingering. *Treatment*.—To have 50 minims elixir of opii if sleepless.

Nov. 21, 10 A. M. Temperature 100; pulse 94. Slept well, and feels much better; had two loose, painless actions from bowels; drank milk toddy at $6\frac{1}{2}$ P. M., and ate an egg with biscuit for breakfast, and enjoyed it. Omit all internal treatment, except the elixir of opium if suffering any return of pain; use antiseptic vaginal douche once daily; catheterized; diet unaltered. $8\frac{1}{2}$ P. M. Temperature and pulse the same; very comfortable.

Nov. 22, 10 A. M. Slept well and feels well, except weakness; passed water naturally this morning; has a slight tendency to night sweats. *Treatment*—

R. Elixir calisay. cort. ad..... $\bar{3}$ iv
 Quin. sulph..... $\bar{3}$ ss
 Acid. sulph. dilut..... $\bar{3}$ ij

M. Sig.: Two teaspoonfuls three times daily in water.

From this day forward this patient progressed to a rapid and perfect recovery.

I present the case as an interesting clinical contribution to obstetric medicine. The obliquity of the uterus, with its resulting simulation of twin labor (the apparent existence of two children noticing and being remarked upon by the female attendants), the contraction of the mouth of the womb over the opening made in the head, and the disgusting hæmorrhagic rectal discharges, are all new and interesting features to me. Where the blood all came from, unless as the result of rupture of some of the hæmorrhoidal vessels during the effort at delivery, I am unable to suggest.

Correspondence.

Croton Oil as a Substitute for the Lancet in Puerperal Convulsions.

Mr. Editor,—In looking over your *Medical Monthly* for February, 1876, my attention was attracted by an article on *Puerperal Convulsions*, by Dr. G. W. Currey, of Nashville, Tenn. I think his treatment good; but permit me to suggest the use of croton oil as a substitute for the lancet in nearly all cases of puerperal convulsions. I feel confident if Dr. Currey had given ten drops to his third case every two hours till the bowels were well purged, the patient would have recovered. I have always found that dropping the oil into the mouth of the patient is the best way to give it. For the past five or six years, I have given croton oil in puerperal convulsions with very happy results. Please give it a trial.

J. R. KIRKLAND, M. D.

Meridian, Miss., March 22d, 1876.

Original Translations.

From the German and French. By WM. C. DABNEY, M. D., Charlottesville, Va.

Spinal Irritation in Consequence of Depressing Influences. By LEYDEN (*Dtsch. Zeitschr. f. Prakt. Med.*, 1875: 43). It is a well-known fact, that frequently after severe typhus [typhoid?], small pox, diphtheria, intermittent fever and malarial cachexia, and also after hæmorrhage, long lactation, and prolonged mental activity, there supervenes a nervous weakness, which shows itself by hyperæsthesia, weakness of the muscles of the back, pain on pressure at certain points, and in stooping over, &c. Subsequently there appears pain in the extremities, in the course of the intercostal spaces, in the epigastric region when pressed upon, and, besides these, unpleasant mental impressions, sleeplessness, and other evidences of disturbances of the "head." Romberg and Leyden distinguish these appearances from those of *tabes dorsalis*; and Leyden discusses also those conditions

which come on after profuse seminal emissions, in the following manner: It may be safely asserted that by far the greater part of those conditions coming on after repeated seminal emissions are not accompanied by any organic disease of the spinal cord, but by spinal symptoms coming on in consequence of nervous weakness. Such patients present a very pale, cachectic appearance, but, as a general rule, are tolerably well nourished, and possess even considerable muscular power. They complain of muscular weakness, especially in the limbs, which resembles paralytic weakness, but which never runs into it. They are easily fatigued and are incapable of prolonged exertion, although for a moment the muscular power in their hands and limbs is quite considerable; their gait is steady, though they often have feelings of uncertainty and giddiness. At the same time they experience abnormal sensations, and especially the formications described by Hippocrates, which travel along the spine, and from thence along the posterior surface of the joints to the feet. In the feet a feeling of numbness occurs, and also a sensation as if one was standing on wool. Then rarely neuralgic pains make their appearance, and also repeated troubles about the passage of urine, difficult defecation, and apparent impotence. Then come headache, dizziness, ringing in the ears, palpitation of the heart, &c., but especially a hypochondria, which feeds itself with the idea of an approaching phthisis of the spinal cord (Rückenmarkschwindsucht), and which is increased by the patient's constantly thinking of himself. The course of the disease is unlike that of any organic spinal affection. *True* paralysis, such as accompany severe affections of the spinal cord, have never been found with certainty, but the symptoms above described accompany a nervous weakness, which is due to an irritation of the medulla spinalis, probably caused by repeated irritation of the sexual organs.

The prognosis of this form of spinal irritation, like other forms, is generally favorable. As a general thing, the special symptoms are relieved in a relatively short time. Severe symptoms sometimes arise from an intense form of hypochondria, which may even cause some apprehension with reference to impotence or consumption of the spinal cord (Rückenmarkschwindsucht). The treatment consists, above all things, in the removal of the causes

of the affection, the lessening of the genital disturbances, and of all excesses. It is of very great importance to lessen the excessive seminal emissions, and for this purpose every remedy and apparatus should be tried. Cauterization, after the method of Lallemand, has fallen into disuse, the apparatus used for the purpose sometimes aggravating and sometimes ameliorating the affection. Good results have been obtained from washing in cold water, cold hip baths, the avoidance of sleeping on the back, &c. With reference to medicines, camphor and lupulin, belladonna and castoreum, have a great reputation. Chloral in small doses ($7\frac{1}{2}$ to 15 grains), at night, has also been recommended. On the other hand, stimulating remedies have been used—especially strychnia, extract of nux vomica, tincture of nux vomica, and other tonics of this class; also iron, quinine, fresh air, shower baths, &c. Besides these indications from the cause of the disease, some psychical treatment is necessary in order to strengthen the patient mentally, and to remove from his mind the dread that he is suffering from some incurable affection of the spinal cord. Any special treatment directed to the irritation of the spinal cord appears to be unnecessary, though it is recommended by many physicians. Not only Ollivier, but also Trousseau and others, who contend that there is congestion of the cord, recommend dry or wet cups to the head, counter-irritation over the spine by painting with tincture of iodine, and even the moxa and the actual cautery. The action of milder means are of little use, in the opinion of these physicians; but it should be remembered that the moxa and cauterization do not cause *unnecessary* pain to the patient.

Neuroses of the Heart in Consequence of Malaria. *Allg. Med. Centr. Ztg.*, 1875, No. 67.) Dr. Kiparsky, who lived for a long time in a region of country extensively visited by fever, observed in the course of his practice several cases of very severe neuroses of the heart, which possessed the following characteristics: The attack generally came on very suddenly, with loss of consciousness, and was generally accompanied by complete cessation of breathing and by pulselessness, and when help could not be procured immediately it terminated in death.

The diagnosis was rendered especially difficult at first, because the first cases occurred in women who were certainly in good

health, and who presented no symptoms of open or concealed intermittent fever, but in all of whom the menstrual discharge was present at the time of the catastrophe. Of the four cases described, we take here only the first and fourth.

CASE I.—O. X. was admitted to the hospital at 2 o'clock in the afternoon, complaining of weakness and pain in the abdomen. The house physician found that the menstrual flow was just commencing, and ordered warm fomentations to the abdomen, with tincture of valerian and Hoffman's anodyne. At 6 o'clock in the evening, when Dr. K. saw her, the pain had passed off and her pulse was only slightly accelerated. No treatment was considered necessary. At a subsequent visit of the house physician, at 8 o'clock in the evening, she was still better. At 7 o'clock the next morning she was found dead in her bed. A *post mortem* examination revealed nothing.

CASE IV.—The wife of a physician, in perfect health, and at the commencement of a menstrual period, whilst pouring out tea for some guests, suddenly became very pale and fell. She was found to be entirely pulseless. After using various stimulating remedies the pulse gradually returned, and after about ten minutes consciousness was restored. About fifteen minutes afterwards the temperature was found very high— 41.2°C . (106.1°F .) Two doses of quinine ($18\frac{3}{4}$ grains each) restored her to health by the next day, and she had no further return of fever.

Dr. K. was convinced by the first case that he had to deal with a concealed pernicious intermittent fever. It should be stated also that the second and third cases terminated fatally. Death occurred in all these cases at the commencement of the cold stage, when, from the very great contraction of the vessels of the skin, the resistance became too great for the power of the heart.

Comparative Investigations on the Milk of Women, Cows and Mares. By Dr. Alex. Languard (*Virchow's Arch.*, 65 Bd., 1 Heft).—These investigations, which have been made after the manner of those of Biedert on cow's milk, lead to the conclusion that mare's milk is an excellent substitute for the "mother's milk" for children, when it can be had in sufficient amount and is fresh. Mare's milk is strongly alkaline, but becomes acid after several days, and the casein is then deposited in fine flocculi. This form of coagulation occurs on the addition of a very weak acid (an excess of acid dissolves the coagula) and it takes place immediately if alcohol be added. The casein from mare's milk, which is precipitated on adding alcohol, is entirely free from fat, and dries

up so as to form a light yellow powder, like human casein, and is not converted into a stiff, horny mass like the casein from cow's milk. The investigations made with various reagents and by means of artificial digestion, show that the casein from mare's milk differs essentially from that contained in cow's milk, and is certainly not *exactly* similar to that in the milk of women, but it is very similar to it in the chemical changes which it undergoes, and it is digested equally as rapidly as the casein from human milk.

Internal Incarceration [Intestinal Strangulation].—At the meeting of K. K. Gesellschaft der Aerzte in Vienna, on the 14th of January, 1876, Prof. Kolb read a paper on the subject of "internal incarceration," which was reported in the *Allg. Wein. Med. Zeitung*, No. 5, 1876, and from which we take the following: Prof. K. warmly advocated laparotomy in cases of internal incarceration, and stated that the operation was not so dangerous as that of ovariectomy. To find the point of incarceration is often very difficult, even on the *post mortem* table. These incarcerations, according to Rokitsky, may be caused by "folding" of the peritoneum, which is quite frequent, but not invariably present, by the contraction of false membranes, which form pockets, into which a piece of empty intestine slips, and these pockets gradually become more flask-shaped, till finally a stage is reached when the intestine is constricted at the mouth of the pocket. If on such pockets a strong "rim" is formed, the internal incarceration is converted into internal hernia.

Rokitansky describes three kinds of strangulation in internal incarceration. The first kind is caused by the pressure of one piece of intestine by another, or by the mesentery. The loose, small intestine is generally pressed against the descending colon or the sigmoid flexure, especially when the first has been overfilled or its innervation thus disturbed, and when the latter is lying empty on the immovable sacrum and pelvic walls. Most cases of incarceration of this kind occur in aged individuals who have a large mesentery, and who suffer from defective innervation and habitual constipation. They come gradually, after a long time and repeated attacks, to this condition.

In two of the four cases reported by Rokitsky, as in one of Kolb's cases, gall stones were found. Perhaps the obstacle to

the discharge of bile prevented the normal peristaltic action of the bowels. In such cases the operation of opening the abdomen promises very little, but it may possibly do good, and should be considered even when no accurate diagnosis can be made.

The second variety of strangulation of incarcerated hernia is that caused by twisting of the bowels. The piece of intestine may be twisted on its own axis, and in such cases even half a turn of the large intestine is sufficient to destroy the lumen. The twisting may be caused by twisting of the mesentery, or by twisting around another piece of intestine. Kolb saw two cases in which the sigmoid flexure was situated over the liver, thus causing a tympanitic percussion sound and a mistake in diagnosis. Internal incarceration of this kind is characterized by its sudden and violent outset, and the early appearance of peritonitis.

The third kind of internal incarceration arises, according to Rokitsky, from certain arrangements of the parts—whether this be from the presence of malformations or from bands caused by disease, which form rings and slit-shaped apertures. The processus vermicularis, Meckel's appendix, the appendicis epiploicæ of the large intestine, the structure of the female genital organs, finally, new formations of every kind which may constrict the small intestine, together with numberless normal folds and pockets, give ample opportunity for internal incarceration. Intestinal closures of this kind may usually be tolerably easily diagnosed during life.

With reference to the treatment in these cases, it is worthy of note that Rokitsky, in the course of his observations, extending over forty years, found that the only mode of treatment of much value was cutting down upon the part. Cathartics are of service in the beginning of the attack, but in a later stage they are injurious, and then the knife is the only certain help.

Dr. Winternitz spoke of irrigation as a mode of treatment which in many undoubted cases of incarceration had been followed by surprising results.* The bowels can hold a large amount of water (1 to 3 litres), and Dr. W. had himself treated a case when, after all other means had failed, relief was obtained by

[*I have treated two cases by means of irrigation (large injections), one within the past two days—both without success. On autopsy, the incarceration in one case was found to have been relieved probably by the formation of gas as a *post mortem* change.—W. C. D.]

simple injections. In twisting of the intestines, as well as in intussusception, when the diagnosis can be accurately made, this treatment is recommended—especially since it has been clearly determined that the water can make its way through the ileo-cæcal valve. Kolb acknowledged the possibility of such results from irrigation, but stated that he had tried the proceeding in two cases without effect, because the patient could scarcely bear the knee-elbow position on account of pain. Besides, he asked what could be expected of injections when the incarceration was owing to bands of false membrane? The most important thing to do was to collect and arrange the clinical and anatomico-pathological evidence, when it would be possible to make an accurate diagnosis during life. The proper mode of treatment would then certainly be found. Dr. Winternitz replied that it was possible to use injections when the patient was lying on the back, if the hips were elevated.

Prof. Wienlechner mentioned a case in his practice where he performed laparotomy in a child for intussusception of the ascending colon. The child died from peritonitis. A youth also died of intussusception who was treated unsuccessfully by enemata of tobacco, injections of water, &c. The patient was already delirious when Prof. W. saw him, and he therefore abandoned the operation. The autopsy showed in this case that an operation would have given a very good chance for recovery. In many cases, contrary to all expectation, the patients recovered. According to his experience, the most favorable time for laparotomy was after the internal treatment had failed.

Prof. Schoötter also spoke in favor of laparotomy.

Dr. Eisenschitz thought that the operation was always calculated to save life. Adhesions did not permit the intussusception being relieved with tolerable ease. English surgeons had found no adhesions even when the affection had lasted five or six days. Cases of recovery after operations for intussusception are not rare. Hutchinson says that evil consequences follow even if the portion of the bowels affected is only punctured and its contents allowed to escape into the abdominal cavity.

Stone in the Bladder in Woman. (*Le Progrès Médical*, Feb. 12th, 1876.) At a meeting of the Société de Chirurgie, on the 9th of February, 1876, M. Nicaise read the first part of some

observations on a woman suffering from stone in the bladder. After a tedious labor, a vesico-vaginal fistula was formed. This was treated by repeated cauterizations, which caused the complete closure of the vagina about its middle. The menstrual fluid was discharged by the urethra, and sexual intercourse was possible. Two years afterwards, the patient experienced some difficulty in passing her water. After dilating the urethra, M. Nicaise introduced his little finger into the bladder, and found on its inferior surface, at the point where it communicated with the vagina, a calculus, which he detached at its edges. The complete detachment of the calculus was difficult, and a small piece remained attached. No accident followed the operation. Four months afterwards, the pain on urinating returned, and the patient re-entered the hospital during the service of M. Després.

M. Després communicated the rest of the observation. Cases of urinary calculus in women were rare, he said, as was proved by the fact that only four cases could be found recorded in the Transactions of the Société de Chirurgie. After having dilated the urethra of this woman, by means of prepared sponge, M. Després introduced an extractor in order to seize and extract the calculus. It broke before being extracted, but after several sittings all the debris was removed. The patient recovered in a few days. He thought that the nucleus of this concretion was a renal calculus, although there had been no renal colic. The speaker remarked that the possibility of calculus ought to be considered before practising the obliteration of the vagina in cases of vesico-vaginal fistulæ.

M. Labbé had operated on four women suffering from stone in the bladder. Two old women were very easily cured. In the other two cases, the formidable accident of absorption of pus supervened, and death resulted. He had in all these cases employed the lithotrite or extractor after the dilatation of the urethra. He thought this proceeding dangerous, and preferred vaginal cystotomy to it. He considered the dilatation of the urethra in women dangerous. A striking case had impressed this upon him. A woman for whom he had dilated the urethra in order to extract a small polypus of the bladder, had died from resorption of pus. MM. Nicaise and Duplay made some observations on the operation.

M. Verneuil protested against the custom which has of late become so prevalent of exploring on the slightest pretext the

bladder and rectum. Grave accidents often follow these procedures.

Localizations in Cerebral Diseases—Secondary Degenerations.—During the past few months, M. Charcot has given a series of most interesting and instructive lectures on this subject, which have been reported in *Le Progrès Médical*. The No. of this journal for January 29th, 1876, contains a lecture on the "Secondary Degenerations" in consequence of cerebral diseases, of which we propose to make a brief abstract.

There can be no doubt whatever, he says, that the persistence of the loss of motor power after cerebral affections, is due, in great part, to secondary degenerations or *descending sclerosis*, and their occurrence should always be borne in mind in connection with the prognosis of cerebral diseases. The probability of sclerosis supervening depends on the seat of the cerebral lesion. (1) Destructive lesions, even though they be entirely circumscribed, which intersect the fibres of the internal capsule between the lenticular nucleus and the caudate nucleus, are very apt to cause descending sclerosis; while, on the contrary, lesions limited to the *gray* nuclei of the cerebral masses, viz.: the lenticular nucleus, the caudate nucleus and the optic thalamus, do not cause consecutive sclerosis. This remarkable fact was discovered by Türk in 1851, and has been repeatedly verified since. (2) The "foci" situated outside of the cerebral masses in the oval centre of Vieussens, provided they attain certain dimensions, still produce descending sclerosis if they are not too distant from the foot of the radiating band (of fibres?). (3) Lesions of the cortical gray substance when very superficial, such, for example, as habitually accompany meningitis, do not produce descending sclerosis. (4) On the contrary, cortical lesions, affecting at the same time the gray substance and the subjacent medullary substance, as in cases of ischaemic softening, resulting, for example, from the obliteration of a large branch of the sylvian artery, even when there exists no participation of the central masses, cause, *under certain circumstances* consecutive sclerosis as pronounced as those which depend on a lesion of the anterior region of the internal capsule. Sclerosis is especially apt to occur if the lesion affect the ascending parietal or ascending frontal convolutions and the neighboring portions of the

parietal and frontal lobes. Superficial softening of the occipital, the posterior parts of the temporal and sphenoidal, as well as the anterior part of the frontal, are not apt to be followed by sclerosis.

A sclerosis, consecutive upon a localized lesion of the cerebral hemisphere, affects always one half of the system of lateral fasciculi. It is more or less accurately bounded, more or less extended in breadth; but it always invades the fasciculi in *their whole length*, even to the lower extremity of the lumbar enlargement. It is never arrested in its course. It always descends, and never goes upward towards the cerebral cortex. The sclerosis extends in the anterior pyramid of the same side and then crosses, when the fibres cross over and pass down in the *lateral fasciculi* as a general rule.

Of special interest in this connection, is the history of a case of **Progressive Muscular Atrophy**, consecutive to a descending sclerosis which occurred at the Salpêtrière during the service of M. Charcot; and which is reported by M. Pitus in *Le Progrès Médical* for February 19th, 1876. It occurred in the person of a woman 79 years of age, who had for some years been afflicted with hemiplegia of the left side. The paralyzed members were the seat of a very considerable secondary contraction, besides which there was very marked atrophy of the interosseous muscles, those of the thenar eminence, of the forearm and the deltoid of the left side. At the autopsy, there was found in the right hemisphere an old hæmorrhagic focus of the size of an almond, situated at the anterior part of the lenticular nucleus, and which had destroyed a great part of the fibres of the internal capsule. From this focus there arose a secondary degeneration, which could be followed through the cerebral peduncles and anterior pyramids of the right side, and throughout the whole extent of the lateral columns of the spinal marrow on the *left* side. The muscles of the left thenar eminence, the interosseous and the deltoid were small, yellowish, and reduced to the condition of "fibro-fatty" bands. The muscles of the left arm and forearm were simply a little paler and slighter than those of the opposite side. On section of the cord, made after hardening in dilute chromic acid, an islet of "fasciculated sclerosis" was found situated, as is the rule, on the posterior part of the left lateral column. Besides

this, on sections made through the upper part of the cervico-brachial enlargement, sclerosis of the left anterior horn was found, with almost complete destruction of the nerve cells of the anterior part of this horn. In all other parts of the spinal marrow the gray substance was perfectly sound.

After the reading of M. Pitus' paper before the Société de Biologie, M. Charcot remarked on the great interest of the case. The permanent hemiplegia with contraction was explained by the sclerosis of the lateral column. Muscular atrophy also existed, and the autopsy showed a lesion of the anterior horns of the spinal marrow. The muscular atrophy, coming on after cerebral hæmorrhage, was of very rare occurrence, and there was no connection between the two lesions. M. Charcot knew of a case in which muscular atrophy occurred in the course of progressive locomotor ataxia.

Progressive muscular atrophy is characterized by a chronic alteration of the anterior horns of gray matter. "Amyotrophic" lateral sclerosis is characterized anatomically by the combination of the lesion of the anterior horns, with symmetrical and primary (?) sclerosis of the lateral columns.

From La Tribune Medicale. By WM. S. STOAKLEY, M. D.,
Bay View, Va.

Thermometric Observations During Various Periods of Chloroform Anæsthesia is the subject of a memoir by Prof. E. Simonin (of Nancy) in a recent number of the *Revue Medicale*. The following are his conclusions:

1. During the stage of excitement to the beginning of the surgical period, the temperature, noted in 24 observations, was raised 22 times above that noted before the anæsthesia begun. This elevation varied from $\frac{1}{10}$ to $\frac{8}{10}$ of a degree (Centigrade).

2. During the surgical stage, the temperature, which in only 5 cases was raised even $\frac{1}{10}$ or $\frac{3}{10}$ of a degree, fell $\frac{2}{10}$ to $\frac{8}{10}$ of a degree (C).

3. During the stage of collapse, the reduction of temperature was $\frac{9}{10}$ of a degree from the highest elevation.

4. In reviewing the whole subject, the temperature is elevated during the first period of anæsthesia from $\frac{1}{10}$ to $\frac{8}{10}$ of a degree above the normal.

5. During the second period of anæsthesia, the temperature is reduced from 1.2° to perhaps 1.4° below the normal.

6. The extreme limits of variation in temperature during anæsthesia have been from 2° to perhaps 2.2° .

7. On awakening from the anæsthetic sleep, the temperature has been sometimes noted to be the same as the normal; now and then it has been elevated from $\frac{2}{10}$ to $\frac{5}{10}$ of a degree; and again it has been reduced from $\frac{1}{10}$ to $\frac{6}{10}$ of a degree.

8. In some cases, the occurrence of hæmorrhage would account for the reduction of temperature; but in its absence this interpretation cannot be admitted.

9. The age and sex of patients have not appeared to modify the results.

10. In defining the stages of etherism, it is convenient to consider, 1st, *the stage of excitement* (increase of temperature), and 2d, *the stage of collapse* (decrease of temperature).

11. The rise of temperature during the stage of excitement and the commencement of the surgical stage, does not seem attributable to an initial, "partial paralysis of the vaso-motor nerves.

12. The theory of a special and primary excitation of this system of organic nerves by the anæsthetic agent, alone seems admissible.

13. A notable cause for the lessening of the number of arterial pulsations is the abolition of consciousness. In general, elevation and diminution of temperature coincide with the arterial beats.

Localization of Cerebral Centres.—Dr. Brown-Séquard communicated a series of observations upon this subject to the Société de Biologie, Dec. 18th, 1875. Since his observations in 1864, he does not look for the symptoms of brain affections in the loss of function of the part affected, but in a sympathetic remote irritation. The production of aphasia, for instance, by lesions of the third left frontal convolution, does not demonstrate that the seat of articulation is in this convolution. These remote symptoms belong to a large majority of cerebral paralyses.

Perhaps a lesion of the medulla oblongata on a level with the motor nerves is an exception to this law; but even in this instance the remote symptoms may predominate. As to lesions of the superior parts of the brain, remote symptoms predominate altogether. This theory alone explains the poorly understood symptomatology of grave lesions, such as the absence of certain usual symptoms of extensive lacerations. Nothing, indeed, is so variable as cerebral symptomatology. Dr. Brown-Séquard essayed to show that paralysis of the extremities may exist coincidently with, or independently of, cerebral lesion of the same, or of the opposite side. Certain facial paralyses of brain origin, resemble certain reflex paralyses. In support of this conviction, Dr. Brown-Séquard read notes of cases in which paralysis had attacked the side corresponding to that on which the lesion occurred. These cases, in round figures numbering about 200, were taken, for the most part, from the reports of eminent clinicians. The experiments, which Dr. Brown-Séquard proposes at some future time to present, confirm the opinions above given. As we cannot admit distinct kinds of motor centres, so we must conclude that their localization, in the strict meaning of the term, cannot be determined.

Treatment of Diabetes Mellitus by Carbolic Acid.—Ebstein and afterwards Muller (*Berl. Klin. Wochenschr.*, 1873 and 1875) have used carbolic acid in solution for diabetes mellitus (grm. j to grm. ccc of water, for three days). Boese published an important paper on this subject, in which, by daily examination of the urine, he demonstrated the incontestable (although limited) influence of this plan of treatment. The quantity of urine excreted was not diminished, but the proportion of sugar was notably lessened during the entire period that the patient was under this treatment.—(*Deutsch. Archiv. für Klin. Med.*, XVI, page 76).

Proceedings of Societies.

RICHMOND ACADEMY OF MEDICINE.

March 16th.—**Correction.**—The first of the cases of diabetes reported by Dr. Fairfax at the last meeting passed about a gallon of urine *daily*—instead of every three hours.

Rupture of Uterus—Death.—Dr. John M. Payne read a paper for Dr. C. A. Bryce, reporting a case of death from rupture of an aneurism in the abdominal cavity, verified by *post mortem*, and also a case of uterine rupture—fatal—which occurred in his practice some five months ago. The woman was a multipara, aged about 40 years, apparently in good health, and at full-term of utero-gestation. The os uteri was dilated and dilatable; vertex presentation; waters not ruptured. The patient had had no hard pains, nor had she taken ergot. The pains, however, were observed to wear off gradually, and the patient complained of weakness and blindness; the pulse sank rapidly and the extremities became cold. Not a drop of blood escaped through the vagina. The head receded beyond the reach of the finger, and in a few moments more the patient was dead. On opening the abdominal cavity, there was a gush of blood. A knuckle of the cord, a leg and an arm protruded through a rent in the anterior portion of the uterus, near the mouth of the left Fallopian tube.

Chylous Urine.—Dr. J. B. McCaw reported the case of a lady who had recently consulted him. She had been perfectly healthy until the last few months. She was, however, nursing her last child, then six months old, and she began to lose flesh very rapidly. Towards the latter part of the month, she observed that although her urine was nearly normal in the morning, it became turbid by the middle of the day, and resembled milk in consistency and appearance. The urine had also lost entirely its characteristic odor. There was no irritation of the kidneys nor of the bladder; neither was there any pain in the back nor any apparent defect in the assimilative organs. The pancreas apparently performed its part, and the liver acted well. A careful examination of the urine showed it to be filled with chyle in the afternoon or night, though there was none or merely a trace in the early morning's discharge. There was also a small quantity of blood as well as chyle, as verified by microscopical examination. Six ounces of the urine passed in the evening yielded a drachm of pure oil; with large traces of albumen and some fibrin; hence the rapid loss of flesh. He had suggested to the patient the propriety of weaning the child at once, and advised the internal administration of gallic acid. Dr. McCaw briefly reviewed the literature of this rare affection, and alluded to the fact that chylous urine was, with few exceptions, to be found in persons living in tropical climates, or who had resided there for a series of years. In Barbadoes, Demerara, and the Isle of Mauritius it was sometimes almost an epidemic, and was associated with a low form of fever. In the case under consideration the patient had always resided in Virginia, and was free from any apparent disease.

The various theories as to the cause of this morbid secretion were spoken of, and the reporter concluded his remarks by expressing the opinion that in this case, all other causes being absent, the condition of the patient was to be attributed to an excessive secretion of chylous fat, excited by a very active lacteal flow, which had ended in this elimination of the bile matters by way of the kidney.

[N. B.—Since the report of this case, Dr. McCaw has informed us that, although the patient is not now under his medical charge, there has been no change for the worse. The general health continues good, and the amount of chylous matter less, the treatment being mainly the continued use of gallic acid.—ED.]

Death of the Fœtus in Utero.—Dr. L. S. Joynes opened the discussion on the selected subject, by remarking upon some of the less obvious or indirect causes of death of the fœtus in utero. He had observed that abortions were common at particular periods, as also in the practice of several physicians in the same neighborhood. He thought that these epidemic occurrences were not necessarily connected with any disease of the mother, but that the cause acted directly upon the embryo or fœtus, which, being dead, became a foreign body. He believed that atmospheric causes could reach the embryo, and that extraneous substances distributed through the atmosphere might be taken into the mother's circulation, and be conveyed by this circulation to the fœtus. The vapor of chloroform, for instance, has been detected in the child's breath after a labor in which that agent had been administered to the mother; there are, also, cases on record in which malaria, as also the atmospheric poison of cholera epidemics, have affected the fœtus in utero; children have been born with the scarlatinal flush, and even with the marks of small-pox, showing that these diseases affected the fœtus in utero. One author, indeed, reports a case in which a child was born with small-pox in its developed stage, while the mother herself did not have the disease; the only reason stated why she was not affected is that she was not susceptible. Instances like those just given undoubtedly show the influence of atmospheric causes upon the fœtus in utero. Maternal mental impressions may also cause fœtal death by producing muscular contractions. Other causes which depress the vital powers of the mother affect the fœtus indirectly. The Doctor then quoted a case in which an earthquake had shocked the mother, and instantly destroyed the life of the fœtus. Allusion was also made to a case in which a mother, seven months pregnant, was so shocked by the terrible "Capitol disaster" in our city, some years ago, that she immediately ceased to feel the motions of the fœtus. Three weeks afterwards, a sep-

ticæmic fever resulted, and he produced premature labor by rupturing the membranes. Dr. J., in view of this and other cases, thinks that mental impressions of the mother may kill the child instantly.

April 6.—Lacerated Perineum—Support of the Perineum during Labor.—Dr. Hunter McGuire reported two cases of lacerated perineum which he had lately treated surgically. The first was that of a very small woman who had been delivered with forceps, in which operation nearly an hour was consumed, and much physical force was required for the foetal extraction. The laceration was about an inch long, extending towards the anus. The raw surfaces were at once brought tightly together by silver wire sutures, and the result was good. The second case was that of a lady upon whom he had operated about two years ago for a lacerated perineum which extended to the anus. During the progress of the natural labor at full term, he supported the perineum in the manner usually directed, for the purpose especially of preventing the old cicatricial tissue from rupturing, which he feared. The cicatrix was not torn in the least; but about an inch or so on one side in front of the fourchette, a laceration of more than half an inch in length did occur. He did not discover this laceration, however, except accidentally, and that some minutes after the birth of the child. Silver wire sutures were at once tightly applied, at intervals of about $\frac{1}{2}$ inch, and the woman is doing well. Dr. McG. thinks it always best to operate at once, without regard to the hæmorrhage from the wound. By pulling the edges tightly together, the hæmorrhage will be checked, and repair takes place by adhesive inflammation rather than by granulation—thus lessening the amount of cicatricial tissue. He applies the same principle in operations for hare-lip.

In regard to lacerated perineum, he thinks the accident occurs much more frequently than physicians are aware. Slight lacerations generally heal of themselves, and their occurrence indeed is often only accidentally discovered while making vaginal examinations for uterine or other intra-vaginal troubles. Perineal laceration is looked upon by authorities as a very frequent cause of prolapsus uteri; but he does not believe either in the fact or the theory. Specialists must discover some cause for the prolapsus when patients come to them, and they are almost sure to find some evidence of a slight laceration in most of the child-bearing women that they examine. Prolapsus is rarely due to a lacerated perineum, unless in those few instances where the perineum has suffered extensive rupture that has not been attended to.

He thinks also that both the practice and theory of "supporting the perineum," as taught to students, not only useless, but fraught with danger, so far as perineal rupture is concerned. Certain it is, that the largest number of lacerated perenei that he has met with in his own obstetric practice, or that have come to him for surgical treatment, occurred in those very women in whom the perineum had been "supported."

Dr. L. S. Joynes stated that Dr. McGuire's remarks called to mind the excellent paper of Dr. Goodell, in charge of Preston Retreat, in Philadelphia, published some time ago in the *American Journal of Medical Sciences*. Dr. Goodell states that "supporting the perineum" is not required; and, as for forceps deliveries, it is best to remove the instruments, whenever practicable, after the head is brought down upon the perineum. Other authors also hold views similar to those expressed by Dr. McGuire as to the support to be given to the perineum—basing their opinions upon personal clinical observations, as well as upon analogy. In the lower animals, rupture of the perineum is an *exceedingly* rare accident.

Dr. O. Fairfax was taught, when a college student, to support the perineum, and practised the recommendation for the first 20 or 25 years of his professional life; but for the past 15 years he had abandoned supporting the perineum, except in certain peculiar cases. He sees no reason for the practice, and his later experience confirms his belief. He does not think slight lacerations productive of serious consequences.

Dr. F. D. Cunningham had also been taught to hold on to the perineum; but in practice had often wondered what was the use of it? Probably, however, he thought, he had prevented lacerations by transferring the strain from the centre of the perineum to the sides by drawing the lateral portions of the vulva towards the centre.

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA.

[Compiled from *Daily Register* and private letters.]

First Day, April 11th.—The Association convened at noon in Mobile, Dr. J. J. Dement, of Huntsville, President, in the chair, Dr. Benj. H. Riggs, of Selma, Secretary.

After the address of welcome by Dr. F. A. Ross, and the President's address to the delegates, Dr. Baird, of the Atlanta (Ga.) Academy of Medicine, was introduced and invited to a seat. The courtesy was acknowledged in a brief speech.

At night, the orator, Dr. R. F. Michel, of Montgomery, in a

polished, eloquent and highly interesting address entertained the audience of citizens and members of the Association.

Second Day.—On motion of Dr. Jerome Cochran, the President was authorized to appoint delegates to the International Medical Congress, to convene in Philadelphia September 11, 1876.

Dr. John B. Gaston, of Montgomery, was elected censor for five years, and Dr. R. D. Webb, Livingston, censor for three years.

The secretary read the report of Dr. W. H. Johnson, of Selma, appointed at the last meeting to report at this, on "Induction of Premature Labor."

Dr. G. A. Ketchum, of Mobile, another of the regularly appointed essayists, read an essay on the "Importance of Health to the State," which was noted for its beauty of diction and logical reasoning.

Dr. Richard Inge, of Greensboro', read a paper on "Inflammation of the Middle Ear," which was well received.

A paper, by Dr. John P. Furniss, of Selma, on "Urethral Stricture," was read by the Secretary in the absence of the author.

At 1 P. M., the Association adjourned to enjoy the elegant hospitalities of Dr. G. A. Ketchum. The Mayor of the city, Mr. Alphonse Hurtel, in responding to a toast, paid a deserved tribute to the City Board of Health, composed of members of the Association, who, by faithful vigilance and persistent and determined efforts, averted the late epidemic which was knocking at the very gates of the city. [It is a pleasure to record such recognition of valuable services.—ED.]

The Association soon afterwards reassembled at its hall, when a discourse on "Artificial Respiration" was delivered by Dr. E. D. McDaniel, of Camden, Wilcox county, which was ordered to be published.

Third Day.—Dr. W. H. Anderson, of Mobile, read his report on "Recent Progress in Physiology." As he was called off by duty while reading, and as he had not entirely completed the preparation of his report, upon motion of Dr. Michel, of Montgomery, Dr. Anderson was allowed time to finish his paper before handing it to the Committee on Publications.

Dr. Jerome Cochran, of Mobile, read a brief of his report on "Public Hygiene."

Dr. R. D. Webb, of Livingston, read an elaborate report on "Hæmorrhagic Malarial Fever," which was highly spoken of.

The Special Prize Committee, to whom was referred the several essays on "Bright's Disease of the Kidneys," for the best

essay on which subject a prize of \$100 was offered last year by Dr. E. D. Seelye, of Montgomery, reported that they had decided on the essay written by Dr. Henry D. Schmidt, of Mobile. Dr. Wm. C. Jackson, of Montgomery, made the presentation address.

Dr. G. A. Ketchum, in the name of the Mobile Medical Society, invited the Association to partake of a collation, which was, of course, cheerfully accepted.

The senior censor, Dr. Jerome Cochran, read the report of the Board of Censors, which was adopted.

Dr. Jerome Cochran proposed an act to create a Health Office for the State, at a salary of \$1,000, as a matter of sanitary importance. [No Health Board can accomplish its desired purpose without some such officer, who can, in a measure, withdraw from general practice in order to attend to the duties implied. It strikes us, however, that the salary proposed is entirely too small to justify the personal sacrifice on the part of any qualified physician who may be elected to the position. The State has no right to expect competent professional services at great personal sacrifice for a mere song.—ED.] The matter was referred to the Health Committee.

Dr. J. S. Weatherly, from the Necrological Committee, announced the death during the past year of "Dr. J. T. Gilmore, of Mobile, and Dr. Bradfield, formerly of this State, but at the time of his death a resident of Pascagoula, Miss. Dr. Gilmore was a most efficient and useful member, always ready to perform any duty imposed upon him by the Association, as reference to the transactions will show—his extensive reports upon surgery placing him in the front rank, not only as one of the most skillful and brilliant operators of the whole country, but also a profound surgical pathologist. In fact, it is feared that the death of Dr. Gilmore may be set down as another sacrifice made by our profession upon the altar of scientific investigation, his feeble constitution not being strong enough to resist the enormous labor which he constantly imposed upon himself in his great desire to investigate and make plain the truths of surgical pathology. Dr. Bradfield fell a victim to yellow fever. He was nobly doing his duty, and fell at his post. He was quite young, but his friends made brilliant predictions for his future; and when his death was announced, it was universally felt that this Association had lost a member who would always have reflected credit upon it and on himself. The following resolution was adopted:

"Resolved, That a separate memorial page be set apart in the next volume of transactions, on which the names of Dr. Gilmore and Dr. Bradfield be inscribed."

Dr. G. A. Ketchum read extracts from the decision of the Supreme Court of the State affirming the decision of the lower court in the case of the State *vs.* J. J. Dement, M. D., charged with contempt and fined for refusing to testify, as an expert, in a certain case in which he had been summoned. [This decision compels doctors to testify as experts in Alabama.—ED.] It was ordered that the decision be printed in the next volume of transactions.

Dr. E. A. Semple, of Montgomery, made a flattering report of his visit as a delegate to the Medical Society of Virginia last fall.

Dr. Cochran regretted that he had been unable to attend the Texas Medical Association.

The chair appointed Dr. W. D. Bizzell, of Mobile, to the Mississippi Medical Association; Dr. J. A. Weatherly to the Georgia Medical Association; Dr. E. A. Semple (and by request of Dr. Semple) [which we cordially second—ED.] Dr. J. B. Gaston to Virginia.

Delegates to the American Medical Association, which meets in Philadelphia next June: J. J. Weatherly, G. A. Ketchum, J. W. Barclay, S. M. Hogan, W. D. Baldwin, J. B. Burke, W. C. Jackson, E. D. McDaniel, G. E. Kemper, J. B. Gaston, C. D. Parker, J. S. Bankson, Jerome Cochran, James Bernly, R. F. Michel, U. D. Richardson, J. F. Heustis, M. C. Baldridge, A. J. Reese, Peter Bryce.

Election of Officers.—President, Dr. E. D. McDaniel, of Camden, Wilcox county; First Vice-President, R. Inge, of Greensboro'; Second Vice-President, J. S. Bankson, of Jackson county; Public Health, I. D. Seelye, of Montgomery; orator, Dr. E. H. Fournier; alternate orator, J. M. Kumpe.

Birmingham was selected as the place for the next annual session.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

[Compiled from the *Baltimore Sun* and *American*.]

The 78th annual session convened in Baltimore at noon on Tuesday, April 11th, 1876, the President, Dr. John F. Monmonier, in the chair, Dr. W. G. Regester, Secretary.

The treasurer, Dr. Judson Gilman, reported 198 members enrolled.

Dr. Gilman, also of the Memoir Committee, reported three deaths during the year: Dr. John L. Yates, age 74 years, a former president; Dr. Samuel B. Martin, age 91, a surgeon in the war of 1812, and afterwards Health Officer of Baltimore; Dr. Henry W. Baxter, age 73, the founder of the Baltimore

College of Dental Surgeons, the first established dental college in the world.

Transfusion of Blood and Milk was discussed in the report of Dr. Christopher Johnson, of the Surgical Section. In speaking of milk, he mentioned the case of a woman into whom fourteen ounces of milk was infused, with successful result. The part of the report relating to transfusion of blood was also very interesting.

At the evening session, Dr. Abram B. Arnold, of the Section on the Practice of Medicine, read a paper on

Pulmonary Consumption. It states, in substance, that this disease continues to exceed the most malignant epidemic in the yearly mortuary reports. During the past ten years pathologists have discovered that a form of consumption may be artificially produced in animals by inoculation of various morbid secretions. Autopsies reveal that tubercular phthisis is caused by self-inoculation, the infecting particles being the residue of some foregoing inflammatory affection. The changes produced consist of the formation of tubercles in the lung, which lead to suppuration and ulceration. Scrofulous persons are particularly liable to this disease. But the greater proportion of cases of consumption result from a peculiar insidious form of inflammation of the lung—cheesy pneumonia. This affection frequently induces, by absorption of its morbid products, the tubercular variety of consumption, so that both forms of phthisis frequently exist at the same time. Hereditary consumption depends on the liability of persons to be affected by cheesy pneumonia, galloping consumption being in every case an extensive cheesy pneumonia, accompanied by fever. Consumption is frequently acquired in certain trades and occupations through the inhalation of dust, etc. There is no doubt of the curability of consumption, for healed cavities are frequently found in the lungs of individuals who, at some period of their lives, must have suffered from consumption. Cod-liver oil is not a specific, but its employment in connection with the skillful management of the case promises good results. The nobler part of the profession is in search for the conditions that prevent a disease, and by the labor and zeal of medical men the adoption of those hygienic and sanitary measures are now urged which will greatly reduce the number of consumptives.

Dr. E. Lloyd Howard, Secretary of the State Board of Health, stated that 2,000 copies of the report of the Board had been printed, but for some reason the members of the Legislature had not generally distributed them.

Second Day.—The annual address was delivered, on invitation, by Dr. Roberts Bartholow, of Cincinnati, who selected as his subject

The Degree of Certainty in Therapeutics.—Some practitioners distrust remedies because of an insufficient acquaintance with their modes of action and utility. With others, an unquestioned confidence in the power of drugs is an exercise of blind faith, or the outcome of uninstructed experience. Faith and experience are unstable foundations of a therapeutical system. Skepticism is surpassed by a lack of faith in the educated laity. Sir William Hamilton declared that "the practice of medicine had made no advance since the time of Hippocrates," but he confounded the practice of medicine with the art of therapeutics.

Diseases can be classified with approximate accuracy as to such as are curable, such as are merely relieved, and such as are unaffected by medicines. The degree of certainty is affected by the influence of the imagination. Everybody is familiar with instances illustrating this influence. A case was stated where Davy, in an experiment upon a patient with palsy, placed a thermometer under the tongue to ascertain the temperature of the body. The patient, ignorant of the process to which he was to submit, but impressed with the certainty of its success, no sooner felt the thermometer between his teeth than he declared that he already experienced its good effects throughout the whole body. Nothing more was done than to repeat the application of the thermometer, and in a fortnight the patient was cured.

A number of methods and remedies, and their effects upon diseases, were discussed to show how far therapeutics had reached exactness, among which the water cure was named as effective in reducing the temperature of the body. Here it can be seen that the means are used and the end obtained. The value of quinine in the treatment of diseases of a malarial type, and many others, and the certainty which attends its use, were dwelt upon at length. Few diseases are curable; and the most of those physicians are called upon to treat are merely modifiable. Many remedies are now employed with a definite conception of their real powers, and a considerable degree of certainty attends their use. More exact results, however, should be obtained.

Experience is unreliable, because it is fallacious. Men differ in their opportunities of observation, in the accuracy and extent of their knowledge, and in the strength of the perceptive faculties. Men differ widely and irreconcilably in their reports of important details of the same occurrences. No science of therapeutics can be created out of empirical facts. Experiments on animals are applicable to man. The effects of medicine upon animals are the same as in man, except in a different degree.

Therapeutics does not deserve the reproach of being a system of imaginary remedies, strangely conceived and fastidiously arranged. True, it is not an exact science, demonstrable like the problems of geometry, but an experimental science, many facts of which, if not mathematically accurate, at least possess a high degree of probability,—some of them capable of the same experimental proof as are the facts of the biological sciences. Great progress has been made in the last few years, and the future is full of promise. The antidote to skepticism is knowledge.

The paper was ordered to be published in the transactions.

Dr. A. F. Erick, of the Section on Obstetrics and Gynæcology, made a report.

Prof. Frank Donaldson, chairman of the Board of Examiners, made a supplemental report, granting certificates of membership to Drs. Wm. B. Harrison, Jr., J. E. Gibbons, J. Shelton Hill, W. A. B. Sellman, George S. Kinnemon, John J. Pennington, and J. H. Grimes.

Dr. P. C. Williams introduced resolutions, which were adopted, instructing the Executive Committee to lease a suitable room for the use of the Faculty, to be under the control of the Library Board; appropriating \$450 to the Library Board, and to defray the expenses of subscriptions to journals, &c., and to pay a librarian. An assessment of four dollars a year was made on each member, payable in April and October.

Third Day.—Drs. Randolph Winslow and John J. Caldwell were admitted to membership.

Volunteer papers were called for, and the following readers responded: Dr. John Van Bibber, on *The Successful Treatment of Peripheral Paralysis*; Dr. A. Friedenwald, on *The Indications of Enucleation of the Eye, and the Correction of Deformity by an Artificial Eye*; Dr. F. T. Miles, on *Abscess of the Brain, with a Preparation*, and Dr. J. Shelton Hill, on *Spasmodic Incontinence of Urine*.

The report of the Sections on Psychology and Physiology, by Dr. J. S. Conrad, treating on

Insanity, maintained (1) that insanity is increasing in greater proportion than the sane population of the United States. 2. That the present system of support and treatment of the indigent insane pursued in this country does not diminish the annual relative increase, but, on the contrary, serves to increase the number of chronic cases. 3. That the present system of hospital organization is expensive beyond the ability of the States. 4. That the cottage system for chronic cases presents the best method of correcting the present system and giving a more economical financial result, with a greater degree of liberty and domestic comfort to the indigent insane classes. 5. That sys-

tematic occupation of the insane can be utilized to a far greater degree than is now the case in asylums of this country, with benefit to the insane and profit to the State. 6. That a greater amount of liberty may be granted the insane, without detriment to themselves or others, than is now the case in almost all the asylums in the United States.

From this paper the following interesting extract is taken: The advance of civilization and trade among the nations of the world brings with their many blessings the blight of mental fatuity in such increasing proportion as to start the inquiry in the practical mind, What is to be done to meet the issue with the means at command? In 1773 the Colonies had but one hospital for the insane, with a capacity of accommodation of only twelve patients. This one hospital for the insane providing for only twelve patients, in a country containing nearly three millions of people, is of itself an index of the relative proportion of insane to sane population then existing. This hospital was located at Williamsburg, Va., and not until 1824 was another one built in the country. In 1828 there were, however, five, of which four were located in the South. In 1839 there were eight. In 1850 there were fourteen. In 1860, thirty hospitals were in active operation. In 1870 this number was increased to forty, and in 1876 we have sixty-two in existence, six or eight more in course of completion, besides sixteen private institutions for the care of the insane. It will doubtless surprise even this assembly of physicians, who, perhaps, have not considered the subject, when I state that the census returns of the United States for 1870 show an increase of 55 per cent., whilst the general population of the States has increased only 22 per cent. The census of 1860 shows the population of the United States to have been 31,443,321, with an insane population of 23,999, or one insane person in every 1,310 of the whole population. The census of 1870 showed the population of the United States to be 38,558,371, with an insane population of 37,432, or one insane person in every 1,031 of sane population. From these figures of the census we ascertain that the population of the United States has increased in the decade 7,115,050, or 22 per cent., whilst the insane population has increased 13,443, or 55 per cent. for the same period. Bringing the calculation up to the year 1875 at the same rate of increase for both sane and insane population, the former is found to be 42,115,896, and the latter, or insane population, is 44,148, or one insane person in every 953 of the whole population, which is more than one per cent. of the whole population of the country. This proportion of insane to sane population appears to be very large. Dr. Wilkins, Commissioner in Lunacy for the State of Califor-

nia, in his report of 1871, has shown that the proportion of insane to the sane population of England is one in every 403 of sane population, or more than double the proportionate number of the United States. In Scotland the insane is one in every 336 of sane population, and Ireland has one in every 302.

Fourth Day.—Papers were read by Drs. Brown, Van Bibber, Chris. Johnson and Frank Donaldson. The fee list was revised, after which transpired the

Election of Officers which resulted as follows: *President*, Dr. Christopher Johnson; *Vice-Presidents*, Dr. James A. Steuart, F. T. Miles, P. C. Williams; *Recording Secretary*, Dr. Wilson G. Regester, Baltimore; *Assistant Secretary*, Dr. G. L. Taneyhill. [*Delegates to the Session of Medical Society of Virginia*, (to convene in Charlottesville October 17th, 1876): Drs. John F. Monmonier and Wilson G. Regester, of Baltimore. *Delegates to the Texas State Medical Association* (1877): Dr. Chas. H. Ohr, of Alleghany county, and Thos. B. Evans, of Baltimore.—*Letter from the Secretary to the Editor.*]

SOUTH CAROLINA MEDICAL ASSOCIATION.

[Compiled from *News and Courier.*]

April 11.—The Association convened to-day in Columbia, Dr. James McIntosh, of Newberry, President, in the chair; Dr. H. D. Fraser, Charleston, Secretary.

Dr. H. H. Toland, of San Francisco, was elected an honorary member.

The President delivered his annual address, in which he paid a glowing tribute to the late Dr. R. W. Gibbes, of Columbia. He suggested the advisability of popularizing the Society proceedings by discussing, among other things, subjects of general interest. He referred to the value of publishing reports of the effects of the mineral waters, the climatology and general attractiveness of the State—especially as a winter health resort. He suggested no remedy for the evil of the rapid graduation of doctors. The address closed with an allusion to the distinguished Carolinians in the medical world.

At the afternoon session, Dr. Maxwell, of Greenwood, gave an account of the removal of a *pine leaf from the bladder*.

Dr. Trezevant, of Columbia, read a paper on *Physostigma faba*, with report of cases treated by the drug. Referred for publication. Dr. Simons also spoke favorably of the drug. Dr. Robertson has used it for sore eyes.

Dr. Turnipseed exhibited a pessary. Several entered into the discussion ensuing.

Dr. Taylor, of Columbia, contributed a report of treatment of a case of epithelioma of the vocal cords. Referred.

April 12.—The history of several interesting cases of retention of urine was given, and caused a valuable discussion by Drs. Robertson, Maxwell, Trezevant, Wylie, Talley, Taylor, Lynch, Simons, Clayton.

Dr. Hughson, of Sumpter, read notes of a successful surgical operation—of special interest in that it illustrated the value of inversion of the body in cases of threatened dissolution from chloroform inhalation.

Dr. Turnipseed gave a verbal account of a case of concussion of the brain; and of another of poisoning by laudanum. In the latter, the stomach pump and liberal use of coffee saved the patient.

Election of Officers.—President, Dr. J. F. M. Geddings, Charleston; Vice Presidents, Drs. J. C. Maxwell, Abbeville; J. H. Foster, Lancaster; G. S. Trezevant, Richland. Corresponding Secretary, Dr. J. S. Buist, Charleston. Recording Secretary, Dr. H. D. Fraser, Charleston. Treasurer, Dr. T. Grange Simons, Charleston.

Delegates to American Medical Association.—Drs. McIntosh, Newberry; W. F. Pearce, Marion; J. S. Buist, Charleston; W. H. Nardin, Anderson; J. H. Foster, Lancaster. Alternate, J. A. Watson, Chester; T. G. Simons, Charleston; W. S. Shepherd, Edgefield; F. M. Robertson, Charleston; J. F. Hughson, Sumpter; S. S. Marshall, Greenville; E. W. Aiken, Fairfield; R. A. Kinloch, Charleston; V. P. Clayton, Richland; F. P. Porcher, Charleston; W. H. Geddings, Aiken; F. L. Parker, Charleston; J. J. Horton, T. F. McDow, Kershaw; A. S. Hydrick, Orangeburg.

Delegates to International Congress.—Drs. E. Geddings, Charleston; T. T. Robertson, Winnsboro'; A. P. Wylie, Chester; B. W. Taylor, Richland; S. Baruch, Kershaw; E. B. Turnipseed, Richland; H. D. Fraser, Charleston.

Dr. Simons moved that the President be authorized to appoint any member who might desire to attend the American Medical Association in place of any nominee who should fail to go. Adopted.

Dr. Turnipseed submitted an account of a case of apoplexy which occurred thirty years after the injury which caused it was received.

Dr. Robertson made a few remarks upon the case, and moved reference to a committee. Adopted.

Dr. Turnipseed submitted a paper on vesico-vaginal fistula, with exhibition of instruments invented by himself for performing the operation upon the same. Referred to Committee on Publication.

Dr. Robertson gave an account of a case (with *post mortem*) of tuberculous kidney. Requested to present fuller report at next annual meeting.

Adjourned *sine die*.

TENNESSEE MEDICAL SOCIETY.

[Compiled from the *American* and private letters.]

The 43d annual session convened in Nashville at 11 A. M. Tuesday, April 4th, President Dr. J. H. Van Deman, of Chattanooga, in the chair.

After the preliminary exercises, Dr. Duncan Eve, of the Committee on Arrangements, reported that all of the railroad lines and the city hotels had made material reduction in fares.

About 15 or 20 new members were enrolled.

The new Constitution, presented last year, was presented for adoption. The qualification of fifteen years' practice for membership was stricken out—the only qualification now imposed being that the applicant be either a graduate of a medical school or have a license to practice by some Board recognized by the Society. The new name of the Society is "The Medical Society of the State of Tennessee."

Drs. J. B. Lindsay, S. S. Mayfield and R. D. Winsett were appointed a committee to draft suitable by-laws, to be adopted next year.

During the *Afternoon Session*, the Treasurer, Dr. J. D. Plunkett, reported a balance in favor of the Society of \$63.60.

The President delivered his annual address, which was ordered to be published.

The Committee on *Medical Annals of Tennessee* reported than an elaborate State Medical History was in preparation.

Congratulatory dispatches were exchanged with the Texas and Kentucky Medical Societies.

The Committee to secure the establishment of a State Board of Health was continued to make an appeal to the State Legislature at its next session.

Dr. W. P. Jones read a paper upon the *Condition of the Insane in the State*, in which it was stated that there are about 1,200 insane persons in Tennessee, and that the only asylum in the Commonwealth (near Nashville) afforded accommodations for only about 400. He offered a resolution to memorialize the General Assembly to establish an Insane Asylum in each of the three grand divisions of the State, which resolution was adopted. Dr. Jones was appointed to prepare the memorial.

Second Day.—Dr. G. A. Baxter, of Chattanooga, read a lengthy paper upon *The Formative Influence of the Father*

upon the Mother and Child—Blood will Tell. Referred for publication.

Dr. W. T. Briggs read a paper on *The Use of the Trephine.* Referred for publication.

Election of Officers: President, Dr. J. J. Abernethy, of Decherd; Vice-Presidents, Drs. F. Bogart, of Sweetwater; J. A. Duckins, of Readyville, and S. T. Evans of Union City; Corresponding Secretary, Dr. R. D. Winsett, of Nashville; Recording Secretaries, Drs. Duncan Eve and J. W. McAllister, of Nashville; Treasurer, Dr. J. D. Plunkett, of Nashville.

Prof. N. P. Lupton invited the society to visit Vanderbilt University. Accepted.

Invitations of Drs. East and Baxter to visit the Medical College Hospital and Museum were also accepted.

The committee (Dr. J. B. Murfree and Prof. Safford) to whom was referred the Rutherford county snake story*, reported that they, "after a full consideration of the facts in the case, are constrained to express their unbelief in the story. They are convinced that a snake cannot live for years and undergo proper development in the human stomach," and offered a resolution asking that further consideration of the case be indefinitely dropped.

Dr. Buist, as a substitute, introduced a resolution providing for the appointment of another committee, who should give the question a fair and impartial hearing, and report the result to the Society at its next meeting. Seconded by Dr. Bowling, and adopted. Drs. J. B. Lindsay, Bowling, Buist, Rawson and Winsett were appointed such committee.

At the *Afternoon Session*, papers were presented by Drs. J. W. Moody, Thos. Menees, W. L. Nichol, Paul F. Eve, S. M. Thompson, T. D. Davenport, E. M. Wright and G. B. Williamson, all of which were referred to the Committee on Publication.

By resolution, one censor is appointed for each congressional district in the State, who shall have control of the county Societies in their respective districts. The following were elected: 1st district, no representation; 2d, Dr. Matt. M. Alexander, Knoxville; 3d, Dr. F. Bogart, Sweetwater; 4th, P. D. Sims, Chattanooga; 5th, Dr. J. C. Marks, Winchester; 6th, Dr. D. Gordon, Pulaski; 7th, Dr. J. D. Plunkett, Nashville; 8th, Dr. J. W. C. Charlton; 9th, Dr. S. W. Goodwin, Union City, and 10th, Dr. B. W. Avant.

*The brief of the case, as reported by Dr. Burger, is as follows: "The patient, Miss Thankful Taylor, lives near Christiansburg, Rutherford county. During her whole life she had been subject to attacks of illness which were supposed to be epileptic in their nature. The snake first appeared in the close of the year 1873. She was then under the care of Dr. White, who treated her for tape-worm. Dr. Burger took charge of the patient in January, 1874, and the snake showed itself several times, the Doctor once thrusting a pin through it, but it escaped down her throat. He says that he extracted it in June of the same year, and that it was $\frac{3}{4}$ of an inch in width and 23 inches in length."

The President elect, Dr. J. J. Abernathy, announced the following standing committees:

Essays and Essayists—Drs. E. M. Wright, W. L. Nichol, A. A. East.

Business—W. P. Jones, C. C. Abernathy, H. J. Warmouth.

Publication—T. L. Maddin, C. C. Blackman, Duncan Eve.

Necrology—Thomas Lipscomb, W. K. Bowling, J. B. Lindsley.

Delegates to the American Medical Association—J. M. Towler, G. W. Moody, E. M. Wright, J. D. Wallis, F. M. Hughes, E. L. Drake, N. G. Tucker, J. F. Grant, J. D. Plunkett.

Delegates to the International Congress.—Paul F. Eve, D. C. Gordon, W. P. Jones, J. H. Van Deman, W. C. Cook, T. Menees, F. Bogart, J. R. Buist, S. S. Mayfield, H. J. Warmouth.

Delegates to Medical Society of Virginia.—Drs. Duncan Eve, Nashville; F. K. Bailey, Knoxville; P. T. Evans, Union City; R. D. Winsett, Nashville, and E. M. Wright, Chattanooga.

Delegates to State Medical Society of Kentucky.—Drs. Van S. Lindsley, Nashville; D. J. Roberts, Hendersonville; C. E. Ristine, Edgefield; T. A. Atchison and M. Baxter, Nashville.

Essayists.—Dr. E. L. Drake, "Treatment of Malarial Pneumonia." Dr. E. C. Marks, "Possibility and Means of Improving the Human Family." Dr. J. R. Buist, "Temperature, Humidity and Movement of the Air, as connected with the Causation of Disease." Dr. P. D. McCulloch, "Foetal Development and its Errors." Dr. J. B. Norris, "Syphilis: Its Effects upon the Nervous System." Dr. H. H. Clayton, "Uterine Hemorrhage during Gestation." Dr. S. M. Thompson, "Anæsthetics." Dr. J. J. Abernathy, "Best Method of Preventing Tuberculosis." Dr. W. T. Briggs, "Resection of Bone." Dr. Duncan Eve, "Coxalgia." Dr. W. S. Hope, "Pseudo-Typhoid Fever." Dr. W. C. Cook, "Gynæcological Surgery." Dr. W. C. Blackman, "New Remedies." Dr. C. S. Briggs, "Value of Human Life and Health to the State." Committee of Arrangements: Drs. J. R. Buist, W. A. Atchison and C. S. Briggs.

Nashville was selected as the place for the next annual session.

TEXAS STATE MEDICAL ASSOCIATION.

[Compiled from *Houston Telegraph*.]

The Association convened in Marshall, April 4th, and adjourned on the 5th.

Interesting reports were read by Drs. Heard and Dowell, of Galveston; Kilpatrick, of Navasota; Ford, of Lynchburg;

Manning, of Waco. Several new members were admitted; also County and City Societies.

Election of Officers.—Dr. Harrison, of Columbia, President; Drs. Pope, of Marshall, Wiley, of Dallas, and Park, of Tyler, Vice Presidents; Drs. W. A. East, Secretary, and Larendon, Treasurer.

Galveston was selected for next annual meeting, on 1st Tuesday in April, 1877.

The ladies of Marshall gave a splendid reception to the Association.

Editorial.

Temperature in Uræmia—Correction.—On page 895 (Feb. No., 1876) of the *Monthly*, in the report given of the Proceedings of the Medical and Surgical Society of Baltimore, Dr. Roberts, of Manchester, England, is credited with having discovered "that in uræmia, the temperature is reduced below the normal standard, while in eclampsia, it is elevated." We have recently received a letter from Dr. Bourneville, of Paris, France, who calls our attention to the fact that he was the first to place in the proper light the thermometric differences between these two conditions, as published in the second collection of his *Etudes Cliniques et Thermométriques sur les Maladies du Système Nerveux*, 1873. This collection of his *Clinical and Thermometric Studies*, which the author has had the kindness to send us, is composed of (1) A series of observations communicated in July, 1871, to the *Société de Biologie*, and published in the *Revue Photographique des Hôpitaux de Paris* (1871, pages 85, 109, 147), and in the *Gazette Médicale* (1872). (2) A second series of observations communicated to the same Society, Feb. 3, 1872, and published in the *Mouvement Médical* (Nos. 12, 14 and 15). (3) An unpublished collection of reports made, at Dr. Bourneville's request, by MM. P. Budin, Cornillon and Rosapelly. This second collection treats of Uræmia and Puerperal Convulsions, and of Epilepsy and of Epileptiform Hysteria—Epileptiform and Apoplectiform Attacks—and is one of the most instructive, and, at the same time, interesting publications on the subject that we have had the pleasure of reading.

Mr. Lester F. Ward, of Washington, D. C., Botanist U. S. G. & G. Survey Terr., 2nd Div., requests that the responsibility of giving the name *Turnera Aphrodisiaca* to the so-called "damiana" be placed upon him, and not upon "Profs. Vasey and Ward."

Dr. Erasmus Powell died in Richmond, Va., after a lingering illness (chronic pyæmia), April 19,—age 56 years.

Other matter is crowded out of this issue.

VIRGINIA MEDICAL MONTHLY.

VOLUME III—No. 3.

WHOLE NUMBER 27.

RICHMOND, JUNE, 1876.

Original Communications.

ART. I.—*The Rational Treatment of Insanity.* By JEROME K. BAUDAY, M. D., Professor of Psychological Medicine and Diseases of the Nervous System in the Missouri Medical College, and Attending Physician to St. Vincent's Institution for the Insane, St. Louis, Mo.

It is a common error to view insanity as something *sui generis*, as being outside and beyond the rules governing other pathological processes. The progress of science has brought us to the point of never mistaking a symptom, or any combination of symptoms for a disease. Paralysis, coma, cough and dropsy will never again be raised to the rank of diseases, except by the ignorant, or the indolent, who will not take the trouble of informing themselves upon the proper diagnostic value to be attached to a mere symptom, or to congeries of symptoms and physical signs.

Now, the morbid mental phenomena, which, taken together, are designated by the terms insanity, lunacy, madness, and mental alienation, are merely combinations of symptoms. Hence the difficulty of formulating a definition which shall not be too comprehensive or defective. The obscurity surrounding the subject will be, in a great measure, dispelled as soon as this fact is fully recognized.

The difference between the symptoms denominated those of insanity, and those accompanying other nervous affections is de-

pendent upon the fact that the nerve cells subserving the functions of *mental* activity are the ones involved, rather than those connected with ordinary sensation and motion.

To the untrained understanding, it seems almost impossible to establish the identity of nervous force, as evinced in the production of motility, sensation and ideation. That there is a perfect correspondence between these different nervous functions is proven—we think conclusively—by the varying combinations of symptoms produced by lesions of separate nervous tracts. Thus, in paralysis, as long as the gray matter of the cerebral convolutions is not involved (as in paraplegia and peripheral palsies), there can be no interference with intellectual activity. In chorea, the mental functions may remain intact; or, on the other hand, they may be implicated to a greater or less degree; and this involvement of the ideational functions progresses *pari passu*, with the advancement of pathological changes in the convolutions of the cerebrum. In general paresis (of the insane, so-called), there are well-known changes taking place in the cortical cells, as well as in the motor-tract of the brain and spinal cord. In syphilitic insanity, the degenerative changes in those cells are equally well-recognized.

What therapeutic lessons may we be safe in drawing from these facts? It seems to us that they are very plain and easily understood. We may add that an experience of nearly twelve years in the treatment of cases of insanity, both in asylums and in private practice, confirms them to us very conclusively.

There is no mode known to science of directly repairing a degenerated nerve cell. As we cannot regenerate a new liver cell in the place of one destroyed by inflammation, so we cannot restore a nerve cell which has been broken down in the process of softening, or absorbed under the pressure of sclerosis. Wherever a cell remains with so much vitality that it is capable of restoration when the proper conditions of plenty of healthy blood, perfect elimination and rest are supplied, we may hope to do something to aid the *vis medicatrix naturæ* in the work it has to perform.

The removal of the cause of cerebral disease is, of course, of paramount importance. There is, however, a large class of patients in which this is impracticable. Those whose ancestry is strongly tainted with insanity, with chronic alcoholism, with ep-

ilepsy, chorea or paralysis; and those who present in themselves or in their families the characteristics of strong neurotic tendencies—those are the predestined victims of nervous affections. In these cases, the cause is removed from our influence; the damage has been accomplished before we arrive upon the scene of action.

Scrofula, gout, rheumatism and syphilis may be removed, or their consequences favorably modified in many instances; a displaced or inflamed uterus may receive such treatment as to remove it from the rôle of exciting causes. An over-loaded colon may be relieved of its burden and prevented from again becoming distended; a torpid or painful digestion may be remedied. In these especial directions, much may be done for our patients' relief, and many happy recoveries will crown our efforts.

Like many other diseases, more especially those of the nervous system, insanity, we are convinced from our experience, usually runs a cyclical course—a course uninfluenced by medication. We do not expect this statement to be received without question, and we are prepared with the proper evidence to support our argument. We are believers in no all-curing property of medicinal preparations; there is no panacea for mental diseases—no specific for insanity.

We hold to the following views, and believe that we can indisputably support them: When a patient is *induced to sleep sufficiently*, is *made to partake of sufficient aliment* (by persuasion, by exciting a healthy appetite, or by forced feeding), and *has his bowels properly regulated*, that medicines can do him no further good, and that continual dosing can but do harm.

Recognizing, then, the general futility of medication, and *the natural tendency toward recovery* manifested by the vast majority of those who are ultimately restored, or, in other words, the *self-limitation of insanity*, we are the better enabled to appreciate the transcendent value of the so-called *moral treatment* of the insane.

In another place* we have discussed the subject at some length, hence, shall merely define the term as used by us, both here and elsewhere, to-wit: Separation of the individual from

*Lectures on Diseases of the Nervous System, by J. K. Bauday, M. D., Philadelphia, 1876, pp. 123-124.

family, friends and business employment; restraint by the imposition of an authority at once gentle, yet firm, and powerful enough to enforce respect; the presence of new associates, pleasant attendants; and the proper use of amusements, books, etc., suited to the degree of his mental cultivation and social condition.

The views enunciated above, we believe to be true ones of the subject discussed, and we shall be well pleased if they shall induce any one to give more intelligent attention to the care and treatment of the subjects of mental disease—a class which is continually augmenting and more strongly claiming a share of the public funds and private care and responsibility.

2106 Clark Avenue.

ART. II.—*Treatment of Cystitis by Atropia Enemata.* By G. WM. SEMPLE, M. D., Hampton, Va.

An article on the treatment of cystitis, written by Dr. M. Schuppert, lately appeared in the *New Orleans Medical & Surgical Journal*, and about the same time one from the pen of the distinguished nestor of medicine and surgery in this State, the late Dr. John P. Mettauer, of Prince Edward, in the *Virginia Medical Monthly*, in both of which injections of solutions of nitrate of silver of various strengths are relied on as the principal remedial agent.

Most cases of acute cystitis that have come under my observation have occurred in young girls with whom the menstrual function had not become regularly established, and the attacks have commenced soon after a menstrual period, and in unmarried women when the function, before its cessation, becomes irregular. Such patients, particularly in country practice, do not willingly submit to the introduction of instruments into the bladder; and besides, it is extremely inconvenient to a country practitioner to give the frequent and regular attention to a patient that such treatment demands. Resort to this practice may sometimes become absolutely necessary, but I have not found occasion to resort to it since adopting the practice which it is the purpose of this article to recommend.

This practice will be briefly stated and illustrated by a few of

a large number of cases that have come under my treatment. It consists in the administration by enema into the rectum of from minims xl to ʒj of a solution of sulphate of atropia (gr. j to water ʒviij), to which is added sufficient carbolic acid to prevent the formation of organic matter and the deposit of atropia. The dose is added to ʒss of water for administration, and given twice in 24 hours. It uniformly and immediately arrests the frequent strangury and painful micturition, gradually checks the mucous and sanguineous discharges, and relieves the suprapubic pain with the cystic inflammation. When the urine is alkaline, Mettau's nitro-muriatic acid is given to correct it; and when it is so acid as to irritate, the acidity is corrected by antacid remedies, of which the bicarbonate of potash, with subnitrate of bismuth, is generally preferred, because of the tonic effect of the bismuth and its very soothing effect on the mucous surfaces of the urinary organs. When constipation exists, which is frequent, it is relieved as occasion requires, generally by the German pulveris glycerrhizæ compositus, until the bowels begin to act regularly from the effect of the atropia, which generally soon results.

Case 1.—Miss —, aged 47, had menstruated irregularly for the last two years, once in from five to seven weeks. About four or five days after the cessation of each menstrual flow, she had burning pain in the pubic region, with frequent painful, straining micturition. At first these symptoms were not very severe, and subsided without treatment on the third or fourth day; but they gradually became more severe, and continued longer, recurring after each flow. For the last five months, during which she has menstruated four times, the symptoms have been constant and very severe, and a large quantity of mucus and some blood have been discharged with the urine. The solution of sulphate of atropia, ʒj, was ordered to be taken night and morning, and the urine being very acid, subnitrate of bismuth and bicarbonate of potash ʒss each, 3 times a day.

On the third day I saw the patient. After the first enema, she had been easy and slept well all night; but her vision in the morning being effected because of a slight dilatation of the pupils, she had not taken the morning dose. Hence, in 18 hours from the administration of the first dose, the symptoms had returned and continued during the day and night. On the third night, the dilatation of the pupils having subsided, the enema was repeated, and again gave prompt relief.

The next day, one half the dose of the solution was given in the morning, and ordered at night. The morning's dose proved sufficient, but that at night only gave partial relief. The pupils not being dilated the following morning, the dose was increased to minims xl, which proved sufficient; the painful micturition never recurred during its continuance, for four weeks, during which period the mucus and blood discharged with the urine gradually diminished, and at length entirely ceased, and the injections were stopped.

The patient had no return of the cystic symptoms until after her next menstrual flow, which did not take place until seven weeks after the last mentioned menstruation. In the interval her health had much improved. On the fourth day after the menstrual flow, which was very profuse, and continued for ten days, painful, straining micturition began, but was promptly relieved by the injections, which it was only necessary to continue for three or four days. She menstruated four times afterwards, but never had another attack.

Case 2.—Mrs. —, 23 years old, mother of two children; menstruation returned when her last child was seven months old, and has menstruated four times. After the first menstruation, on the sixth day, began to have painful, straining micturition, which annoyed her much for several days. On the fifth day after the second menstruation, the symptoms recurred and continued much more severe for a week. On the fifth day after the third menstruation, symptoms recurred with very much greater severity, and continued to increase in severity; violent burning pain in the pubic region came on, and much mucus and some blood were discharged with the high colored urine. She could get little sleep, though she took large doses of laudanum frequently. The symptoms continued during the whole interval, until the next flow, when they were much mitigated, but returned with increased violence on its cessation.

I saw her about the 12th day, and prescribed minims xl of the solution of sulph. atrop., to be taken night and morning. The dose was found sufficient to afford only partial relief, and was next day increased to 3j, under which, with the aid of bismuth and bicarbonate of potash, she recovered in a week. The symptoms recurred after the two succeeding menstrual periods, but were promptly checked, and never returned until after the first menstruation at seven months, during lactation, after bearing her next child. This attack was easily controlled by the treatment, as were two other attacks following, at the same period, after two other children. After the next child she did not suffer.

Case 3.—Mrs. —, primipara, aged 38, was delivered with

forceps, after a tedious, protracted labor, during which, it was necessary to use the catheter several times. All went well for three days. On the morning of the fourth day, at 10 o'clock, I was informed that a copious secretion of milk had commenced early the night before, attended by high fever, and that frequent desire to pass urine ensued about day. The efforts to pass urine were attended by violent straining and great pain. A little over ℥vii of high-colored, acid urine had been passed, in which were deposited about ℥iv of mucus, colored by blood, and a few blood clots. She complained of severe pain in the pubic region, and a sense of fullness in the rectum. The castor oil which had been directed for the morning had not been taken. Tongue was furred with brown fur, pulse 98 and skin hot. A copious enema of flaxseed mucilage operated well, unloading the bowels of much hard, fecal matter. An enema of ℥j of the solution of sulph. atropia was given, and citrate of potash ordered as a febrifuge and antacid. The enema given at 12 M. promptly relieved the painful, straining micturition, and between that time and 6 o'clock the next morning, the patient passed urine without pain three times—in all about ℥xvj . That first passed was not improved in appearance. The next discharge contained no blood clots, and the mucus was less colored with blood. The third discharge contained much less mucus, and was very little colored by blood. Soon after the third discharge, the patient had a fourth and painful effort, passing very little urine; and the efforts continued every few minutes—the violence of the pain, and the relative quantity of mucus increasing at each effort, and the mucus becoming more tinged with blood. On my visit at 8 A. M., I found her very restless; could not allow me to remain in her chamber long enough to make satisfactory examination. The injection of atropia was immediately repeated. Visited her at 11. The micturition had become less frequent, and the last passage of urine was almost painless. Pulse 78; no febrile heat; secretion of milk much reduced. Ordered subnitrate of bismuth, with bicarbonate of potash, $\overline{\text{aa}}$ ℥ss , three times a day; enema of flaxseed mucilage at 2 P. M., and enema of ℥ss of the solution of sulph. of atropia, to be repeated night and morning. Under this treatment the urine gradually became healthy, the mucous and bloody discharges from the bladder ceased, and the pain in the pubic region was relieved. There was no more painful micturition until the sixth day.

On the sixth day, the patient, fearing the effect of the continued use of the atropia, suspended it for 24 hours, and the painful micturition returned. It was then resumed, and no mucus or blood having appeared in the urine, and the patient con-

tinuing free of all pain for four days, all medicines were stopped. The secretion of milk having been almost entirely suspended by the action of the atropia, was restored by rubbing the mammary glands with castor oil twice a day for 10 days. The patient had a good getting up. The bowels acted regularly after the second enema of mucilage—a result always to be expected from the action of atropia.

Case. 4.—An old gentleman, over 60, having contracted gonorrhœa, was too much ashamed of it to call for regular medical advice, but put himself under the treatment of a negro, who treated him with pine-top tea. The gonorrhœa was cured, but a violent cystitis induced, which, relying on the assurance of the negro that it was only part of the regular course of the disease, and that all would go well, he suffered for more than four weeks before he called on me for treatment. On my first visit, I found him standing over a urinal making violent straining efforts, complaining by loud groans of very great pain, and passing only a few drops of urine mixed with bloody mucus. This was late in the afternoon of a summer's day. All the urine he had passed during the day was contained in the vessel—not a pint. One-third the contents of the vessel, I suppose, was bloody mucus, and a few small clots of blood. The urine had a very strong ammoniacal odor. He continued the efforts for about 10 minutes, and in 15 minutes resumed them. He assured me he had been suffering in the same manner for four weeks, and that he had not had an interval of more than half an hour between his efforts to pass urine for a week. He complained of violent burning pain over the pubes, in the neck of the bladder, and along the course of the urethra, and of a sense of fullness in the rectum. He was constipated, reduced in flesh and very feeble. On examination with the finger, the prostate gland was found much enlarged. A warm "sitz-bath" was ordered, to be followed by an enema of 3ss of the solution of sulph. atropia, both to be repeated in the morning. Early the next morning, a messenger came for me, saying the patient was no better and wished to see me as quickly as possible. Taking with me a better syringe than that which had been used, and a vial of Mettauer's nitro-muriatic acid, I found on my arrival that, though not so much relieved as he had expected, the patient yet had been more quiet; the intervals between the passages of urine had generally been nearly an hour, and he had once slept for nearly two hours uninterruptedly. As part of the enema which had just been administered had passed off, another was given with the new syringe. Nitro-muriatic acid was ordered to be taken three times a day, and the bath and enema to be repeated night and morn-

ing. The first passage of urine took place about an hour after the enema, and the intervals during the day were subsequently about three hours. The urine was passed freely until it was nearly all discharged, when bloody mucus and sometimes small clots of blood obstructing the passage, some straining and pain occurred. After the bath and enema at night, the patient slept well for seven hours. Under this treatment he gradually improved—all the symptoms gradually ameliorating, and the patient slept well at night. For three weeks mucus continued to be discharged, which, for twelve days, contained blood. He continued the treatment for ten days after the mucus discharge ceased, and for more than six months had no return of the symptoms, which were again induced by a ride on a cold morning for several miles on a wet buggy cushion. He relieved the attack without consulting me, by resort to the same treatment.

I forgot to state that on the second visit he was ordered to take every alternate morning $\bar{3}j$ every two hours of a $\bar{3}iv$ emulsion of castor oil, containing $\bar{3}j$ of castor oil, minims, ij of oil of bitter almonds, and minims iv of oil of gaultheria until the bowels moved. It was necessary to take this twice only before the bowels began to act regularly, under the influence of the atropia.

Nephritic inflammation was to have been anticipated in this case from the effect of the turpentine on the kidneys, but there were no symptoms of it. After the cure of the cystitis, the prostate gland was found reduced to its normal size.

I first saw this treatment recommended in some medical journal years ago, but my library having been lost during the war, I cannot credit it to the proper author. The physiological action of atropia is well elucidated in the report of an interesting case reported by Professor W. H. Anderson, M. D., of the Medical College of Alabama, in the *Transactions of the Medical Association of the State of Alabama for 1874*.

ART. III.—*The Remittent and Continued Forms of Malarial Pneumonia*. By OTIS FREDERIC MANSON, M. D., Professor of Physiology and Pathology in the Medical College of Virginia, Richmond.

[Continued from page 97.]

Symptoms.—The remittent form of malarial pneumonia usually attacks suddenly, being almost invariably ushered in by a chill, which is frequently of severe intensity, and attended with rigors.

Yet, in very grave cases, the system is prostrated almost beyond the capability of reacting, and a prolonged cold stage is the result. Death, however, rarely occurs in the *first* cold stage; but fever, more or less developed, sooner or later ensues. The febrile symptoms may continue for hours, and even days, in some cases, before any pulmonic signs or symptoms declare themselves. But usually, within twelve or twenty-four hours the symptoms of pneumonia appear. Pain in the side is generally next experienced, it being absent in very few instances. In some cases, however, the cough is tardy in its appearance, or is so slight as to elude the notice of the attendants. Headache, nausea and vomiting are very frequent and prominent symptoms, and frequently precede the cough and pain—the fluids ejected from the stomach being usually of a bilious character. The cough is commonly dry at the commencement, or attended with an excretion of glairy mucus; but sooner or later, the sputa becomes more or less tinged with blood, forming the pathognomonic expectoration, the hues of which are as numerous as the proportions, in which blood and mucus may be mingled. Thus, we may see, in some cases, the sputa merely tinged with blood; or, as more frequently occurs, a uniform bloody, frothy fluid is seen, of various degrees of fluidity, visciduity and tenacity, whilst in some few instances, a pure and copious hæmoptysis is observed. Later, however, the expectoration is liable to great variations in color and hue; thus, it may be of the various shades of brown, red and yellow commingled, and in the advanced stages may become green or almost black. The febrile action presents decided peculiarities, being usually distinctly paroxysmal and remittent. The remissions are, however, frequently slight and obscure. On watching the patient closely, however, although the rest of the body maintains a febrile heat, a *coolness* of the *extreme parts* will be almost invariably observed, generally occurring daily and during the morning hours. This reduction of temperature may be confined to the ends of the nose, toes or fingers, and in grave and rare cases may extend over the entire extremities, or even the whole surface. This coolness of the skin is not generally felt by the patient, but, on the contrary, when it is present he usually complains of sensations of excessive internal heat. A marked increase of fever follows this in-

sensible chill, which continues to increase in intensity until an exacerbation more or less perfect is developed. The pulse, which had been very frequent and contracted in the chill, becomes expanded, acquires force, and sometimes, though rarely, becomes full or tense. The term compressible applies to the usual condition of the pulse, and the idea conveyed on its careful examination is, that the heart is acting with only a seeming force, and not with real vigor. In some few cases, the pulse has been observed to be nearly normal or abnormally slow. The respiration in the chill is more frequent and irregular, and the dyspnœa more urgent than in the exacerbation. The disease progressing unchecked, the paroxysms usually become less marked, the respiration becomes more constantly frequent and difficult, the acts often exceeding 60 per minute; yet in some rare cases of even grave character, the breathing is but slightly accelerated during the whole course of the disease.

A new symptom, in many cases, now sets in. The patient, who, before, may have been entirely rational or only slightly incoherent in sleep, or at the height of the exacerbation, suddenly becomes wildly and persistently delirious. With the advent of the cerebral trouble, the cough becomes less frequent and often entirely ceases—the patient also breathing apparently better than when in a more hopeful condition. The tongue now becomes brown, or black and dry; sordes collect on the teeth, and the skin and sclerotica assume a jaundiced hue. The delirium increases in intensity or passes into coma, after which death soon ensues. Delirium, however, may be absent in every stage of the disease—the intellect remaining calm and clear until the last moments of life.

The fever, as has been stated, partakes of a remittent character; but these remissions are sometimes so very transient and slightly marked as to escape attention, unless closely observed. In the large majority of cases the remissions occur during the morning hours. During these remissions the pulse becomes less frequent; the skin diminishes in temperature, and sometimes relaxes in perspiration; the pain in the side becomes ameliorated, and sometimes disappears; and the dyspnœa is greatly relieved. To the remission succeeds another chill, or cold stage, as already described, followed by an exacerbation of more or less violence,

during which all the local and general symptoms are usually notably increased in intensity. The disease, progressing unchecked, loses its paroxysmal character, and becomes continued—maintaining this character until death ensues; or again reverting to the remittent, or assuming the intermittent type, should the disease yield spontaneously in violence or to remediate measures. The termination in health is marked by the rapid or gradual diminution of the violence of the symptoms, by the occurrence of diaphoresis, by a copious secretion of urine, and almost invariably by the discharge of greenish-black, viscid, inodorous or inoffensive stools. The expectoration loses its bloody or rusty tint—the sputa assuming the smooth, light, straw-colored appearance, characteristic of the resolution of pneumonia.

The disease, however, sometimes becomes chronic, with copious purulent expectoration, often mingled with blood—the fever becoming hectic in its character, and terminating in death. In more fortunate cases, the affection, after many weeks, and even months, duration, may give place to entire restoration to health.

The Continued Form of this disease occurs very frequently as a primary or secondary phase. In violent cases, as happens in simple malarial fever, the remissions are altogether absent at the commencement, or beginning with evident remissions or intermissions, the case may assume the continued form. But sooner or later, the inherent disposition of this, like all other malarial affections, to revert to the periodical character, declares itself in the large majority of cases. In those instances forming an exception to this rule, it is probable that the inflammation of the lung gives rise to symptomatic fever, which, mingling with, obscures or annihilates the periodical rhythm.

Physical Signs.—From the period of the introduction of auscultation, a peculiar sound has been considered diagnostic of the first stage of pneumonia. The name given to this sound by its distinguished and immortal originator was the “crepitant râle.” “The crepitant râle,” said Laennec,* “is the pathognomonic sign of inflammatory engorgement of the lung. The sign manifests itself from the commencement of the inflammation; it then presents the resemblance of very small equal-sized bubbles, which appear to be very slightly humid.” “As the engorgement in-

*Traite de L'Auscultation, 3^{me} edit., pp. 416-17. Paris, 1831.

creases and approaches towards hepatization, the crepitant râle becomes more moist; its bubbles become more unequal and less numerous." So important and constant did Laennec consider the presence of this râle, that he declared that by this sound he could recognize "a central pneumonia of not greater dimensions than an almond or filbert," and that, "if examined early, not only central pneumonia, but those cases termed lobular pneumonia were easily diagnosed in most cases."

Whilst I trust that I feel a becoming diffidence in recording my experience in regard to the presence of this râle, yet candor compels me to say that I do not often hear it in the first stage of the form of pneumonia under consideration. In many instances, after patient and careful examination, made hour after hour and day after day, I have failed to detect it, although the attendant symptoms rendered the diagnosis positive. I may, therefore, be permitted to quote the views of authors on the subject, who held opinions different from the great author. Nothing can be better adapted to subdue the ardor of the student of auscultation than failures to detect signs which are strongly insisted upon by high authorities as being pathognomonic and universally present, and it is to reassure those who, like myself, have failed to verify always the lessons which they have been taught *ex cathedra*, that I now recite the opinions of others upon this subject.

"In a certain number of cases," wrote Louis,* "Laennec relied exclusively on auscultation to indicate the existence of pneumonia; to him the crepitant râle appeared sufficient as a sure diagnostic sign of that affection."

"We all know how skilled the senses of Laennec were, how acute his ear was. However, as the difference is not very great between the crepitant râle when its bubbles are little larger than usual (for it does not always possess the same fineness) and the subcrepitant râle when very fine, Laennec has thus been deceived, and has mistaken, in a great number of cases, one of these râles for the other. The error of Laennec has doubtless been also that of many other physicians who have succeeded him."

Says Skoda,† the celebrated Professor of Vienna: "Laennec seems to have frequently observed the crepitating râle. I rarely meet with it." * * * "In the great majority of cases,"

*Recherches sur les Effets de la Saignée, pp. 55-6. Paris, 1835.

†Auscultation and Percussion, Markham's translation, p. 313, et seq. Phila., 1854.

he continues, "according to my experience, the auscultatory signs of pneumonia do not follow in the order assigned to them by Laennec. It frequently happens that the fine, equal-bubbling râle is not heard at the commencement of pneumonia; we meet with the unequal-bubbling râle—Laennec's mucous râle—or whistling and sonorous sounds much more often at this period."

On this point, Professor Alison* observed: "There is in general more difficulty in forming a judgment as to the existence or extent of inflammation in the substance of the lungs, for the inflammation is very frequently combined with others in the chest; and although the 'râle crepitant' and the 'peripneumonic sputa' are occasionally well-marked and characteristic symptoms, yet they are by no means to be depended upon as constant symptoms."

Dr. R. B. Todd,† the eminent practitioner and author, of London, on this subject makes this very positive statement: "Laennec asserts that a fine crepitant râle may be heard on listening to a lung in the first stages of pneumonia or that of active congestion, and that this is speedily succeeded by the signs of red hepatization; but in the whole course of my experience I have had but very few opportunities of hearing this râle ushering in the stage of red hepatization, and which was considered by Laennec as pathognomonic of pneumonia. This is explained partly by the rapid transition to which I have referred, and partly by the fact to which Skoda has directed attention, that this condition of lung is, in general, immediately preceded merely by catarrhal râles in the bronchial tubes, and not, as believed by many, by a peculiar kind of fine crepitation."

In regard to the character of the sound heard in the peculiar form of pneumonia under consideration, M. Constant‡ observes that "the crepitant râle is almost always moist, and that he had only heard the parchment-crackling râle two or three times in more than sixty cases."

M. Saillard§ is in accord with M. Constant. He observes: "In the first stage the crepitant râle is generally humid. In the cases in which it appears to be dry, it only possesses that quality at the commencement."

It will be perceived how great the discrepancies are in the views of talented and experienced observers, whose attention has been specially directed to diseases of the chest, in regard to this râle. As I have before intimated, my experience accords with those who believe that it is far from being a constant sign.

*Cyclopædia of Pract. Med., iii, 254. Philadelphia, 1852.

†Clin. Lectures on Acute Diseases, p. 239. Philadelphia, 1860.

‡Bulletin de Therapeutique, xliii, 484. Paris, 1852.

§These de Paris, 1860, p. 29.

What signs have we, then, in the first stage of malarial pneumonia? According to my observation, besides the fine crepitant râle of Laennec, the subcrepitant râle, with bubbles of varying dimensions, may be present, and not unfrequently coarse mucous râles are observed. Occasionally we also hear the hissing, whistling and sonorous sounds of bronchitis. In the cases of purely intermittent type the physical signs often totally disappear with the fever, and in the cases of marked remitting character, they are more faintly pronounced; the continued presence of crepitating râles, however, in the remission or in the intermission, would not alone be a proof that the inflammation of the parenchyma still continued in active progress, when all other indications denoted its abatement or total disappearance.

In some cases—those of a grave and rapid character—the lung passes rapidly into the second stage or solidification; in fact, it appears to be solid from the commencement of the disease. Constant has made the same observation. “A distinctive feature,” he remarks, “is the rapid passage from the first to the second stage of the disease, so that eight or ten hours after auscultation had revealed only a slight circumscribed râle, a whole side will be found hepatized.”

Percussion, which reveals nothing before solidification ensues, now renders the most important and positive assistance in the diagnosis. I have nothing to add to that which has been written concerning the auscultatory signs in this stage, except that it has not been my experience to find bronchophony and bronchial respiration so frequently present as held by many writers in this stage.

Pathological Anatomy.—Although the appearances exhibited in the lung after death have been seldom reported, and though they have been variously described by different observers, yet there is a remarkable accord in the views of practitioners in regard to the essential nature of the changes manifested in the lung. Dr. Nathaniel Chapman,* who gave the disease the name “congestive pneumonia,” characterizes the condition of the lung as that of the “heaviest congestion.” Drake† declares that “some of the most dangerous cases are the least inflammatory

*Benedict's Compend. Chapman's Lect., p. 218. Philadelphia, 1846.

†Diseases Int. Valley of N. America, 2d series, pp. 868, 871.

and most intermittent, presenting in their phenomena and mode of termination a great resemblance to "malignant intermittents," after having previously observed that "although the functional disturbance of the lungs may be quite as great as in the most acute inflammation, but it results largely from sanguineous engorgement and tardy transmission of blood through the organ." Constant* also considers the pulmonary lesion rather as a sanguineous engorgement than inflammation. These views coincide with those of Drs. Meritt,† Coolidge,‡ Gibbes,§ Lewis|| and Glisan¶.

It is doubtless from an attentive examination of the phenomena presented during life that so many observers have been led to the same conclusion, that the affection of the lung in this disease is, primarily, rather one of congestion than well-developed inflammation. I was led to adopt this view from having seen persons without premonition suddenly struck down in the cold stage of the disease, in whom percussion and auscultation revealed a complete solidity of one or both lungs. In this condition, the pulse sometimes would be thread-like, and the action of the heart very feeble; the whole skin wet with a cold, clammy perspiration, and even the breath of the patient would be cold. In some of these cases, the whole side, in others the inferior lobes of both lungs would be perfectly flat upon percussion; and this condition of the lungs would ensue at the very invasion of the disease, for hours, in some cases for days, not only before any febrile action would ensue, but even before the patient began to show symptoms of reaction. These cases seem to me very instructive, and clearly appear to be the results of extensive passive congestion, due to paralysis of the capillary vessels of the lung. In these death-like conditions of the whole system, it certainly is not rational to suppose that inflammation can exist. Inflammation is an active process, and cannot be said to be present where the vital powers are almost on the verge of annihilation. It is true that such prolonged cold stages do not often occur, as the initial stage of the disease; yet as these cases present examples of the highest development of the effects resulting from the morbid cause, they are peculiarly and most

*Bulletin de Therapeutique, xliii, 484.

†U. S. Army Reports, 269.

||New Orleans Med. Journal iv, 30.

‡New Orleans Med. Journal, viii, 14.

§Amer. Jour. Med. Sci., iv, 289, 297.

¶U. S. Army Reports, 281.

strongly illustrative of the pathology of the disease. It is after the febrile symptoms appear that signs of inflammation are developed; the circulation in the lung may then be said to be aroused for the first time, and then commence to occur those changes in the capillaries which may terminate in resolution, or in the various processes of inflammation. The rapid disappearance of the signs of solidification affords a proof that this condition of the lung in some cases is that of simple congestion. In from twelve to twenty-four hours the returning râle or the normal murmur is sometimes heard. This, also, has been observed by M. Constant, who states that "a whole side which had been found hepatized under the influence of large doses of quinine, thus rapidly disappears, giving way to returning subcrepitant râle during the remission of the fever, but returning again during the paroxysm, if this has not been cut short."

We have said that with the access of fever that symptoms of inflammation begin to develop themselves; the affection of the lung may have been primarily a stage of simple congestion of the parenchyma, diminishing or disappearing in the following remission or intermission, yet, a true inflammatory process sooner or later commences, increases, and extends with each repetition of the paroxysms. We may, then, have after death all the appearances of inflammation of the lung, as clearly, apparent, as if the disease was actively inflammatory from the commencement. Accordingly, we find that Cleghorn,* who examined fourteen of his fatal cases (termed pleurisy or winter fever in his day), states :

"The lungs were principally affected, whilst in several the pleura was perfectly sound, or only slightly attached to the lungs. In many the lungs were converted into a hard, liver-like substance, and sunk in water; in some the diaphragm was inflamed; in others, large, firm polypi were taken out of the ventricles of the heart and large vessels adjoining. Abscesses, or, rather, half formed abscesses, with a sanious ichor and a rotten, gelatinous substance, instead of concocted matter, were frequently found, even in those who died as early as the fourth day, either in the lungs or between the lungs and pleura, where they adhered, or between the membranes of the mediastinum, near the diaphragm. And these abscesses had sometimes emptied themselves into the cavity of the thorax, so that the lungs

*Diseases of Minorca, London, 1768, pp. 267-269.

floated in purulent serum—their external membrane, and likewise the pleura, being greatly thickened, and converted, as it were, into a white crust, like melted tallow from cold, part of them being eroded and detached from the rest. In some bodies the pericardium was full of purulent serum—its internal membrane and the outer surface of the heart being affected in the same manner as I have just now described those of the lungs and pleura. In two people whose heads were examined, the sinuses of the dura mater were stuffed and distended with blood, the membrane itself being sound, and the pia mater, together with the plexus choroides, was inflamed and much thicker than in a natural state.”

Morehead* relates that of the seven cases of *febrile pneumonia* (as he terms the disease) examined after death, there was hepatization in five and induration in two, “and in all of them increased redness of the bronchial mucous lining was well marked;” in five of the cases evidences of pleuritis were present, but in two there were no traces of it. The brain was not examined.¹

We translate the following case given by M. Catteloup,† in which the symptoms during life and appearances after death are detailed :

Gaubert, æt. 28, of a robust constitution, was brought March 19th on a litter to the hospital. He had been ill for two days. No history of the case was given. He was bled by the surgeon in charge. On the next day he presented himself to us in the following condition: Pain beneath the left nipple; dyspnœa; percussion, dullness over the præcordial region; crepitant râle at the base of the left lung anteriorly and posteriorly; no expectoration; harassing cough; pulse 80, full and hard; respiration 30. Prescribed 30 leeches over the painful point, and four scarified cups posteriorly on the chest.

On the 21st and 22d, the pain had disappeared with the fever; dullness and bronchial breathing throughout the hypochondrium; no expectoration was present; anorexia; thick mucous coat on the tongue; thirst; three liquid stools. Emetic potion of 20 grains of ipecac; epispastic over the side of the chest.

23d. Same condition of the lung. The patient complains of violent headache. Paroxysm of fever, embracing its three stages, in the evening; frequent cough and dyspnœa; respirations 30. Kermes’ mineral, 15 grains, in expectorant mixture.

24th. In the morning, patient calm; in the evening another

*Diseases in India, p. 522. London, 1860.

†Pneumonie D’Afrique, p. 19. Paris, 1853. :

paroxysm, terminating in a furious delirium. Sixteen leeches to the jugular regions; 30 grains of sulphate of quinine.

25th. Coma; dilated pupils; jaws strongly contracted together; pulse small and frequent. The patient with difficulty took 30 grains of quinine, which was retained; flying sinapisms to the extremities.

26th. In spite of an appearance of hebetude, the patient seemed to be free from danger. He responded properly to questions, and breathed freely. However, the dullness on percussion and tubular breathing persisted. Pulse 70. Sulphate of quinine, 12 grains.

27th. Same state of apparent calm. No cough or expectoration.

28th. Reappearance of cerebral symptoms; tetanic convulsions; patient vociferous, succeeded by profound coma; extreme dyspnoea; alteration of the countenance. Death occurred on the night of the 29th.

Autopsy.—Sinuses of the cranial cavity gorged with blackish blood; pia mater and cerebral substance injected, and presenting red points. Besides these, there were no traces of encephalic inflammation. The left lung in its inferior two-thirds presented hepatization in the second degree. The liver and spleen were filled with black blood. The other viscera presented nothing of note.

Nature of the Disease.—By some this malady has been regarded as a hybrid, or as the simple idiopathic pneumonia of writers occurring in those who have been previously exposed to malaria; and by others it has been considered as only one of the many and various manifestations of the morbid action of malaria.

Let us first examine the hybrid theory. The investigations of the morbid anatomist have sufficiently proven that after death the lungs of persons who have suffered during life from a vast number of different and dissimilar diseases, have been found in various stages of hyperæmia and inflammation, such as active congestion, hepatization, splenization, carnification and suppuration. When, however, these conditions have been associated during life with their appropriate physical signs and rational symptoms, and unconnected apparently with any other disease, such affection has been termed "simple pneumonia," *i. e.*, an inflammation occurring primarily in the lung parenchyma, from which all the other symptoms arise, and upon which

they are alone dependent, which symptoms increase or alter with the progress of the lung affection, and from the persistence or extension of which local affection a termination in death results, or on whose decline and disappearance a restoration to health ensues.

That such a disease as simple pneumonia may exist, I cannot positively deny, but I dare aver that the records of medicine do not, as far as I have examined them, afford convincing proof that any such disease has prevailed to any great extent, or, in other words, that it has prevailed in an endemic or epidemic form, or that it is of such frequent occurrence as to constitute it or entitle it to be considered as a type-form of disease. In a practical experience of more than thirty years, I do not feel sure that I have met with a single case of primary inflammation of the lung, unless those very rare cases resulting from traumatic causes* can be so considered. This experience is nearly similar to that of Sir Thomas Watson,† who states that he has “been surprised to find how few cases of pure idiopathic inflammation of the lungs present themselves among his hospital patients; that five or six in the year are as many as he sees there, and in this view Barlow‡ fully concurs.”

In regard to frequency of occurrence, how different is it with malarial pneumonia? A description of the vast number of its epidemics which have been recorded by writers on both sides of the Atlantic, would fill a volume. It is habitually endemic or epidemic in vast portions of this country, constituting one of the most frequent and fatal diseases the practitioner has to encounter. How is it possible, then, that it can be considered a hybrid disease, when one of its constituents—simple pneumonia—is of rare occurrence? How can a disease of frequent appearance and extensive prevalence be considered as a combination when one of its components is a rare disease? Hybrid epidemics can only frequently occur where both progenitors are numerous. According to my observations, the so-called pneumonias are

*According to my observation, traumatic pneumonia is usually of a very circumscribed extent, and rarely presents the diffusive or spreading character of ordinary pneumonia—a strong proof that the so-called pneumonias are not usually of local origin. This experience coincides with that of Legouest (*Traité de Chirurgie D'Armée*, Paris, 1863, p. 469). He observes: “L'inflammation du poulmon à la suite des blessures de cet organe, est plus rare qu'on n'est porté à l'admettre. La pneumonie traumatique n'a pas de tendance à le généraliser et reste le plus souvent locale.”

†Lectures on Principles and Practice of Physic, 2d Amer. ed., p. 514.

‡Practice of Medicine, p. 203.

merely the local lesions occurring in constitutional maladies, and may be termed the local expressions or localizations of some general disease.

That the lung affection in this disease is merely one of the local determinations induced by the morbid action of malaria is proven by the local affection being secondary and subordinate in its character. Indeed, it often happens that the febrile action precedes the symptoms and signs of pneumonia for hours, and even days. We have seen, also, that the local symptoms follow the march of the fever, that they increase, diminish, remit, and even intermit with it. The cases of intermittent pneumonia we have detailed, from reliable and skillful authorities, conclusively prove that this is a simple disease. If it is a combination of idiopathic pneumonia and malarial fever, why does the local lesion disappear in the apyrexia? Has the intermittent fever any curative power over the lung lesion? What becomes of the idiopathic inflammation in the intermission of fever? Why is it powerless to excite fever, when unconnected with malarial disease it almost always gives rise to intense symptomatic fever? Indeed, the cases of merely *remittent* type offer insuperable objections to the hybrid theory. So slight is the suffering, so little accelerated the pulse and respiration, and the temperature so little exalted in the *remissions*, that an observer not conversant with the malady would hardly think it necessary to examine the chest; and yet these cases may terminate in death in the next paroxysm. On the other hand, the same observer could not realize that the patient, seen in the exacerbation with high fever, flushed cheeks and sparkling eyes, suffering from the most intolerable dyspnoea and agonizing pain in the head and chest, by timely and judicious treatment in a few hours might be freed from fever and pain and firmly placed in convalescence, and that often independently of remedies addressed to the lungs.

That this malady, so widespread, so rapid in its career, and so fatal in its tendency, can be suddenly arrested in its course, is a fact of most momentous importance. Whatever difference of opinion may be entertained in regard to the pathology of the disease, this fact, sustained as it is by so many reliable witnesses, cannot be controverted. If it is contended, therefore, that this is a combination of idiopathic pneumonia and malarial fever, it

must be admitted that quinine possesses the same controlling power over inflammation of the lungs that is universally accorded to it in other forms of malarial disease.

Among the many objections urged against this view of the pathology of this disease we think only two are deserving of notice in this place, viz.: 1st. That the anatomical character of malarial disease does not include congestion or inflammation of the lung; and 2d. That the temperature of the seasons favorable to the production of pneumonia is destructive to malaria.

I need not tell those who are familiar with the various lesions to which the morbid action of malaria may give rise, that they are as numerous as the organs of the human body. To those who are not conversant with the pathology of malarial disease, a reference to the monographs of Morton,* Torti,† Senac,‡ Medicus,§ Eisenmann,|| Sarcone,¶ Bailey,** Alibert,†† Maillot,‡‡ Boudin,§§ Bonnet,|||| Nepple,¶¶ Mongallez,*** Gintrac††† and others, will afford convincing proofs of the vast variety of lesions which occur from malarial poisoning. Indeed, it may display its pernicious influence in any part of the system, as in the fibres of the smallest nerve, in periodical neuralgia, or produce the most serious lesions of the brain and spinal marrow, liver, spleen and other vital organs, as proven by the dissections of Maillot, and many others. Even the names of the vast number of periodical affections and organic lesions occurring during a malarial epidemic, arising from the same cause, and cured in the same manner, would consume an unwarrantable space to recite here. Sufficient is it to say, that the morbid influence of malaria gives rise to various types, grades and forms of disease having no special anatomical seat. It may produce every grade and type of fever, from the simple ague cured by a charm, to the most malignant form, in which life is destroyed in the first paroxysm.

The second objection is, that the temperature, etc., of the sea-

*Opera Medica De prot, Febr; Int. Lugduni, 1736.

†Therapeutice Specialis ad Febres Perniciosas, 1825.

‡De Recondita Febr; Int. tum Remitt. Nat. Amstelodami, 1759.

§Geschichte periodischer Krankheiten, Carlsruhe, 1764.

||Die Krankheits—Familie Typosis (Wechselkrankheiten), Zurich, 1839.

¶Maladees observees a Naples, 1, 1805.

**Traite des Fievres, Int. Paris, 1825. ††Ibid, 1820. ‡‡Ibid, 1836. §§Ib., 1842. |||Ib., 1852.

¶¶Fievres Remit. et Int. Paris, 1828.

***Monographie des Irritations Intermittentes, Paris, 1839.

†††Pathologie Interne., Paris, 1853, iii, 770.

sons most favorable to pneumonia is destructive to malaria. I know that it is a favorite idea with many that, because the winter season, with its bleak winds and heavy frosts, usually puts an end to the ordinary autumnal epidemic, it is certainly and entirely destructive to malaria itself. I need not say that the precise temperature necessary for the production of malaria has never yet been determined; but we know that primary attacks of intermittent and remittent fevers not unfrequently appear during the warm spells of weather so often observed during the winter and spring seasons, showing that the poison had been merely reduced to temporary inaction, but not destroyed. Like the mosquito and other insects of warm climates, which disappear instantly after a heavy frost, but which quickly reappear beneath the genial influence of Southern winds in winter, so malaria emerges from its torpor and develops its effects. That this poison has been newly developed is proven by its action in winter on those who had never been previously exposed to its influence, and for whose illness the theory of latency cannot, therefore, afford an explanation. That malaria should give rise to various forms of local disease in different seasons of the year might be reasonably expected. It is a fact which will scarcely be questioned, that during the prevalence of any fever in seasons of low temperature, pulmonary affections are prone to occur as complications. In scarlatina, rubeola, typhoid fever, variola, erysipelas and other febrile diseases it is very common. There are some causes, therefore, existing and belonging to the season, which either excite or predispose to lesion of the lung parenchyma. In instituting an inquiry into the operation of those causes, it will be necessary to bear in mind that the system has passed through the fervid heat of summer, and the balmy temperatures of autumn, by transitions more or less variable to the colder season of the year. Usually, the outward man has been prepared for this change, the whole surface of the skin having been protected from the effects of reduced temperature by clothing of proper quantity and quality. But how is it with the lungs, the only vital organs which are exposed to the direct contact of air? What has been done to protect that extensive, delicate lining of the air tubes and air cells—that admirably contrived membrane, abundantly supplied with blood vessels?

It is evident that this great change of temperature cannot take place without some important physiological revolution in the pulmonary circulation, and that during the change these organs are, therefore, peculiarly liable to disturbance.

But there is yet another function which has also to undergo an important modification. The skin, which, in the warm seasons, had been exalted to excessive activity, gradually falls into a state of comparative repose, as the bleak season arrives. This evidently occurs, however perfectly it may have been protected. This subsidence of function must necessarily be followed by a determination of blood to the internal organs. When to these predisposing influences are united the morbid action of malaria, we have a combination of causes well calculated to produce congestion of the lungs. In the initial cold stage the blood violently recedes from the periphery to the centre. As Broussais pertinently remarks, "the chill of intermittent fevers has the same effect as that produced by the impression of cold air or cold water. Like these bodies, it suppresses the cutaneous evacuation, and in like manner tends to replace them by internal discharges." We have, therefore, to explain the production and phenomena of this form of pneumonia:

1st. The predisposing tendencies of low temperatures to produce an afflux to the lungs by direct contact with their interior surface.

2d. The same cause, by repression of the cutaneous evacuation, determining to the whole internal organs.

3d. The operation of malarial influence which possesses an inherent tendency to produce internal engorgement.

Treatment of the Cold Stage.—In this stage it is evident that the state of internal congestion is most intense; the indications are, therefore, to remove or lessen this condition. As in ordinary cases the vital powers are competent to produce reaction, the employment of active measures will be unnecessary; but when the cold stage is serious and protracted, the usual means adopted in malarial fever should be called into requisition. Warm applications are to be assiduously made over the whole length of the spinal column and to the extremities, together with stimulating frictions, and to these may be added warm cataplasms of mustard or capsicum to the anterior and lateral surfaces of the

thorax. If these means should be unsuccessful in restoring the circulation to the surface, enemata of the sulphate of quinine may be used; grains viij or x of the salt dissolved in ℥ij of mucilaginous fluid may be thrown into the rectum every half hour or oftener, until symptoms of reaction ensue. If diarrhœa has been or is present, the following enema will be more efficacious:

Quiniæ sulph.....	grs. x
Morphiæ sulph.....	gr. $\frac{1}{4}$
Acid. sulph., dilut.....	gtt. x
Aquæ.....	℥ij.

M. S.: To be used as the former, but at longer intervals.

Should these means fail, the remedy should be administered hypodermically, or, if the case be urgent, this method should be employed without delay.

The following is the excellent formula of M. Dodeuil for its hypodermic use:

Distilled water.....	20 parts
Sulphate of quiniæ	2 parts
Tartaric acid	1 part

One-third less than the usual dose of quinine is required when given by the skin.

During the Exacerbation, the indications are to calm the action of the heart, remove congestion, and prevent the occurrence of the next paroxysm. If the pulse is hard, full or tense, as it is in rare and exceptional cases, or if the patient is robust or previously healthy and possesses ordinary vigor, the pain or dyspnœa very intense, and the character of the pulse or other symptoms do not decidedly contraindicate it, then a moderate quantity of blood may be taken from the arm. In this disease, general blood-letting should be employed with a view *only to moderate*, and not with an expectation to cut short the disease, nor should it be employed except in the instances referred to. In cases where this is not followed by marked relief, and in those where venesection is inadmissible, the local abstraction of blood by cups or leeches should be resorted to, and may be used as freely as considerations of safety will permit. The time at which bleeding by any mode should be practised, is that period when the exacerbation has reached its acme, which is almost invariably in the afternoon or evening.

The administration of medicine is generally postponed until

9 or 10 o'clock P. M., at which time a full dose of calomel (grs. xv to xx) is administered. If diarrhœa, or a tendency thereto, is present, Dover's powder, grs. viij or x, is combined with the mercurial. Two or three hours thereafter, this is followed by a full dose of quinine (grs. xv to xx) in pills, or diffused in a wine-glassful of cold water. Three or four hours are now allowed to elapse; we now usually repeat the quinine in doses of grs. v to x, in proportion as the pulse may have been reduced, until 35 or 40 grains have been administered, and the patient is then left at rest.

According to my experience, the chill cannot recur whilst the patient is under the influence of the above quantity of the alkalioid; the fever may, however, continue, but usually in a very moderate degree. Should this be the case, the local bleeding is repeated in the evening exacerbation, and calomel, in small doses of grs. j or ij, with gr. ss to j of ipecac, or grs. ij of Dover's powder, is given every one or two hours. After midnight, the quinine is repeated in the same manner, or in less quantity (in direct proportion to the degree of fever present), until the period of chill has passed, when all medicine is again suspended. It is rare, indeed, that cases thus treated in the early stages do not exhibit the most flattering amendment on the day succeeding the first night on which this plan is adopted; and still more rare that every dangerous symptom has not disappeared on the succeeding day. Should the pneumonic symptoms, however, persist, the mercurial should be continued until its constitutional effects are produced. In some cases, where the arterial action is not disposed to yield, and the dyspnœa continues, I have ventured on the use of tartar emetic in small doses, in union with quinine. The antimonial should, however, be carefully used; and it is better to commence with a minimum dose of one-tenth or one-twelfth of a grain, to be gradually increased as it may be borne. I think it proper to say, too, that the gastric irritation and tendency to diarrhœa, so often present in this disease, contraindicate the employment of tartar emetic generally. When these obstacles exist, the veratrum viride may be substituted in many cases with marked benefit. Whether alone or in combination, the quinine should, however, be continued for several days after the active symptoms have disappeared. Blisters may

be employed at almost any stage of the affection, but under this mode of treatment may often be altogether dispensed with.

In the Apyrexia.—In cases of purely intermittent pneumonia when first seen in the apyrexia, quinine must be immediately given—by the mouth if the period of the expected paroxysm is more than six hours, but hypodermically if sooner anticipated. If first seen in the exacerbation, as we cannot await an intermission with safety, the treatment of that stage, as before detailed, will be applicable.

ART. IV.—*Diseases of the Heart—Mitral and Aortic Lesions.*

(A Clinical Lecture at the Medical College of the City of New York, by A. L. LOOMIS, M. D., Professor of Pathology and Practical Medicine.) Phonographically reported by a Special Reporter.

Before proceeding to the examination of cases, Prof. Loomis presented a heart which exhibited the following changes :

When the left ventricular cavity was opened, it was found capable of containing three or four times the normal quantity of blood. In addition to the dilatation, the valves at the aortic orifice were firmly adherent to the walls of the artery upon one side, but appeared nearly normal upon the other. The valvular lesion evidently had admitted of regurgitation. Above the valves, the artery had undergone extensive atheromatous degeneration, and at one point it was slightly sacculated. The dilatation of the left ventricle was, undoubtedly, due to changes secondarily to hypertrophy. The regurgitation, when first developed, had been attended by a dilatation, which was followed by a compensatory hypertrophy that subsequently gave way to a dilatation that went on at the expense of the hypertrophied cardiac walls. In many places the walls had become quite thin, and the muscular structure did not, to the naked eye, present the appearance of normal cardiac tissue. The chordæ tendinæ were lengthened, the columnæ carnæ were diminished in size, and the appearance of cardiac tissues in active growth, such, for example, as obtains in simple hypertrophy, was not exhibited.

The patient died suddenly and without symptoms, save those attending syncope. It could be easily understood how a person with such a heart might die from syncope. The ventricular cavity was capable of containing three or four times the normal quan-

tity of blood, its walls were much less powerful than normal, and when the heart became overcharged the ventricle was unable to completely empty itself. Now, if from some sudden excitement, the blood was made to rush into the auricle and distend it to its utmost, it struggled to empty itself, but being unequal to the task, the heart stopped and the man died. That is what happens when death occurs suddenly in connection with cardiac lesions affecting this set of valves.

History of the Case of Mitral and Aortic Lesions now presented is as follows: A male patient, æt. 23 years, said that he had been sick about one week. Two years ago, he had an attack of acute articular rheumatism, which affected nearly all the joints, confined him to the bed for six weeks, and prevented him from walking very much for six months. He had no recollection of having suffered pain in the chest during that sickness, which was his first and only rheumatic attack. The patient denied having had venereal disease, but admitted that he had led a dissipated life since he was 12 years of age. There has not been any noticeable shortness of breath, or other prominent symptoms of cardiac disease. During the past two years, and until one week ago, he had felt perfectly well. One week ago, he got a wetting, and, since that time, had noticed that blood of a dark color was occasionally present in his sputa. The blood had never been of a bright-red color, and was only trifling in quantity.

Comments.—"The more prominent symptoms of cardiac disease are dyspnœa, cough, swelling of the feet, palpitation, blood in the sputa, and pain in the præcordial region. Now, turning our attention to this man, we find that he has not suffered from pain in the chest, has never had dyspnœa to any extent, has never had any swelling of the feet, except in connection with the rheumatic attack. He has only had bloody sputa recently, and some cough.

"We may first ask ourselves the question, What symptoms in the history of the case lead us to suspect that this man has cardiac disease? First, the fact that he has suffered from acute articular rheumatism; also, the fact that he had an attack of rheumatism at the age of 20, and that it lasted for six weeks, is almost certain evidence that acute endocarditis complicated this rheumatism. If his first attack of rheumatism had been delayed until he had reached the age of 35 or 40, a cardiac complication would have been a rare occurrence, although not among the im-

possibilities. Again, this patient has had more or less cough, which recently has been attended by an expectoration that contained small blood-clots. This is a symptom of considerable significance.

Before proceeding with our physical examination of the chest, let us ask the question, what cardiac disease should we expect to find that gives so little trouble to the patient as this man has evidently suffered? I am sure the heart lesion, which may be carried for years without giving the patient any serious inconvenience, and, indeed, its presence may never be suspected, is that which gives rise to mitral regurgitation. This is a clinical fact, and I will not now stop to discuss its *rationale*.

“Again, the fact that this man has had an expectoration containing a small amount of blood, would lead us to the suspicion that the valves at the mitral orifice are at fault.”

Physical Examination.—Upon *inspection*, the chest was found well developed, symmetrical, and a distinct pulsation could be seen in the carotids, just below the xiphoid cartilage, and over the præcordial region. Upon *palpation*, the apex beat was found diffused, and the exact point at which it came in contact with the chest wall was not easily determined. Upon *percussion*, dullness was increased to the left, and slightly downwards. Upon *auscultation*, a distinct blowing murmur which was conveyed to the left, was heard with greatest intensity at the apex, and was synchronous with the first sound of the heart. As the stethoscope was moved towards the base of the heart, a murmur was heard, moderately distinct, which was lost as the instrument was carried up over the carotids. To determine the exact nature of that murmur, the stethoscope was placed over the junction of the second costal cartilage with the sternum upon the right side, when it was found to occur just after the second sound of the heart. The second sound could be distinctly heard; but immediately after it came a fine and quite prolonged murmur, indicating that there was sufficient of the valvular element left to close the aortic orifice; but with the slight relaxation after the production of the second sound, there came this evidence of slight leakage. It was not a sudden gush which indicated extensive valvular lesion. Besides, the sound was carried towards the apex of the heart, and could be heard nearly as distinctly well towards the apex as over the point mentioned. It was not conveyed in the direction of the xiphoid cartilage nearly so distinctly as towards the apex.

“By the late Dr. Cammann, of this city, it was held that when an aortic regurgitant murmur was conveyed towards the apex, and was heard with an intensity equal with that heard at the base, it was evidence that the posterior portion of the semilunar valves was the part affected. However that might be, there was a murmur in the case before us which was heard with about the same intensity at the apex as at the base of the heart—a murmur which followed the second sound, and preceded the first sound considerably, although it was conveyed almost through the period of the next.”

The *diagnosis*, then, was slight aortic, and also slight mitral regurgitation.*

“I have already stated,” said Prof. Loomis, “that it is wonderful that extensive endocardial changes may be present, and yet the patient not suffer from cardiac symptoms. It is not, therefore, so much the valvular lesions (although they are important) which we wish to recognize, as it is the changes which have occurred in the walls and cavities of the heart, if we would arrive at intelligent conclusions concerning the danger present in any case of cardiac disease which may come before us. The mere fact that you hear a murmur has but little to do with a correct understanding of the case under examination. You must be careful not to be misled by the mere quality of a murmur. It is not the loudest murmurs that are the most dangerous; it is not by the intensity of the murmur that you are to determine its real character; for sometimes a very slight murmur, one which can scarcely be heard, although constant, may indicate a very serious cardiac lesion. On the other hand, you may have a very loud murmur—one which can be heard over the entire anterior portion of the chest—and yet it may not be indicative of much danger.

Even when you have diagnosticated the seat and character of a murmur, you have done but little towards getting at the true prognosis in any case of cardiac disease. A very slight obstruction may give rise to a murmur, and so may a trifling leakage of the valves. And yet these murmurs are organic, and are due to organic changes—the result, perhaps, of an attack of

*These murmurs were made out by the students who were called upon to examine the case in the presence of the class, and were subsequently verified by the Professor.

endocarditis during rheumatism—but they are really very insignificant. The patient may carry them for years, and still the heart remain just as good as when you first listened to it. There is something besides the mere presence of a murmur that must be taken into consideration. If there is much obstruction or regurgitation at any set of valves, there are other changes of more importance than the murmurs, if the obstruction or regurgitation has been of much duration. For example, murmurs may be present at the base of the heart, indicating that there is obstruction or regurgitation at the aortic orifice, and yet have no special signification; but when the aortic orifice becomes narrowed so that the opening will scarcely admit the little finger, you will have an obstructive murmur of a very different kind from that produced by a slight deposit upon the surface or edge of the valves. With such a narrowing, the patient will have an insufficient quantity of blood thrown into the arteries, and the ventricle remains constantly overcharged. The consequence is that the walls of the ventricle become hypertrophied—that is, simply increased in thickness. That which will tell you most under such circumstances is the fact that the arteries do not receive the proper quantity of blood; their impulse is diminished; it is shortened; you obtain the shock of the impulse, but, at the same time, do not get any actual filling of the arteries. If there is insufficient out-going blood, there will also be imperfect nutrition; hence, sensation of syncope, cerebral anæmia, and a long list of changes which result from this stenosis at the aortic orifice.

You may have a slight deposit upon the mitral valve, which will give rise to a murmur as the blood passes over it, or there may be a slight leak through which only a trifle of blood escapes from the ventricle back into the auricle. Such a patient will not suffer from the want of this small quantity of blood being carried into the artery, but you will get a murmur just as easily as when the lesion is extensive.

How, then, are you to make a prognosis, when the murmur heard indicates mitral obstruction or regurgitation? If the lesion is extensive, the auricle becomes overcharged, and behind that you will have interference with the pulmonary circulation. You will be led, then, to examine the lungs, and then the right heart and other organs.

A very good rule for determining the exact amount of leakage that may be taking place at any set of valves, if you attempt to judge concerning this by the mere character of the murmur, independent of other evidence, is this : If, for instance, you hear the sound of the heart distinctly, and then a murmur, the mere fact that you first heard the normal sound tells you that the valves are sufficiently good to close the orifice for the instant ; but as the pressure increases, the valves give way, and allow the blood to regurgitate. Such a murmur will also be a prolonged murmur. But suppose you hear a gush as the apex strikes the wall of the chest—a gush that displaces the first sound completely—it shows that the mitral valves have not sufficient valve tissue remaining to close the orifice at all. In this way you may be able to judge quite well concerning the extent of the lesion—by the time at which the murmur is heard rather than by its diffusion or intensity.

An important item, however, in the completion of the case, and one which more particularly interests the patient, is the *treatment*. With proper care, this man may get along for many years, and suffer but little. It seems that he has been addicted to the use of stimulants since he was twelve years of age, and that he has thrived under their influence rather than otherwise. He is an apparent illustration of a class of persons with whom stimulants seem to agree. There are some persons who can indulge in alcoholic drinks with seeming immunity, while others cannot indulge, however moderate, without suffering severely. The moderate use of stimulants in this particular case, then, will probably do no harm. The great point, however, in the treatment of this class of cases, is to increase nutrition ; carry it up to the highest possible point ; and if that can be best gained by the use of small quantities of alcohol, it will prove itself a valuable agent.

In addition, it is important for the patient to receive such treatment as tends to maintain nutrition at the highest possible point. His exercise should be moderate, and well-regulated ; his diet should be nutritious, and of easy assimilation ; his habits should be regular ; and his nutrition can also be increased by the judicious use of iron."

ART. V.—*Fibroid Tumor of Prostate Successfully Treated by Injection of Iodine.* By MELVILLE TAYLOR, M. D., Govans-town, Md.

J. C., single, æt. 26. of fine physique, a fencer by occupation, presented himself in my office March 3d, 1875. He stated that about nine months ago, he discovered a tumor about the size of a chestnut, in the perineum, just behind the scrotum. It was at first somewhat movable, but for the last six or seven months, has been firmly stationary. Its growth, from time of discovery to above date, was gradually progressive, and at this time is as large as an ordinary base-ball. Never has had any pain, but lately has complained of a sense of weight and dragging in the perineum, and at times severe tenesmus. Urinates frequently, slowly, and with much straining; the water at times contains mucus, and is decomposed and ammoniacal. Lately his urine has been dribbling from him. His walking is greatly interfered with by the tumor between the thighs, and for this reason only, it appears, he applies for relief. Eats heartily and sleeps well, and, as usual in prostatic troubles, chronic constipation is the order of the day.

Exploration of the prostate by rectal touch, reveals an abnormal enlargement of this organ to the extent above stated. It is hard and firm, presenting to the fingers four different segments. No increased sensibility. Upon the passage of the catheter, an obstruction is met with at the prostatic portion of the urethra; but this, after some manipulation and not a little pain to the patient, is overcome, and the instrument slips into the bladder, when about 3xx of foetid urine is passed, although he had urinated previous to its passage. The catheter causes some pain when impinged against the walls of the bladder.

Being undecided, as yet, in my diagnosis, and wishing to relieve the most urgent symptoms, and gain a little time, I prescribed for him a mixture of bicarbonate of potash, iodide of potassium, tinct. lupulin, tinct. cubebs, with a little Holland gin, to be taken *ter die*; and to relieve the chaffing, a powder of equal parts lycopodium and oxide zinc. A cold water enema every morning just before going to stool. The catheter I passed about every 36 or 48 hours. After several weeks of the above treatment, I found that while the dribbling had ceased, and the urine now passed was more natural, and voided less frequently, it was still accompanied with much straining and tenesmus at each attempt. Having made up my diagnosis of fibroid, I ordered him R. Potass. iodid., gr. x; syr. ferri. iodide, gtt. xxv. M. and take *ter die* in place of the potash mixture, and continue the other portion of the treatment as before.

He was now tolerably well skilled in the use of the catheter, and passed it frequently to avoid the straining, &c., preferring the attending pain, which was now but little. This course of treatment, for about three weeks out of every month, was kept up, with little change, until last October. During this interval his condition was much improved in every way, except the tumor, which appeared neither to have increased nor diminished.

The idea now presented itself of employing ergot or iodine hypodermically, more, I must frankly confess, as an experiment than for any great good I expected to derive from their use, for reasons elsewhere stated. The patient expressing his willingness to the plan, I injected 15 drops tincture of iodine well into the tumor. It required some force to push in the needle a certain distance, after which it passed on very readily, as though entering a cyst or cavity. Considerable reaction followed this injection—the patient having kept at his work this day and the next, contrary to my orders; but with appropriate treatment this irritation subsided in a few days.

This was on October 9th this plan of treatment was begun. On October 21st, and on November 3d, 12th, 23d and 29th, 15 drops of tincture of iodine were injected at each time. He exercising proper precaution, no disagreeable results ensued.

I did not see him again until December 21, when examination revealed considerable reduction of the tumor. He now walked with little inconvenience. Four more injections were given him up to January 13, 1876. Being called to New York on business, he remained there two weeks. I found on his return that the tumor was steadily decreasing, and that he urinated now with considerable ease, and expressed himself as being much pleased with his improved condition. Has not used the catheter since some time in December last. Nine more injections of 10 drops each have been given since January 20 to date (March 20), with the happiest results.

The question would now arise as to whether this growth was due to simple hypertrophy or enlargement, by interstitial plastic effusion, or to an unnatural development of the prostatic tissue itself. The first may be, I think, answered negatively, by referring to the history of the case, the very gradual growth of the tumor, and the entire absence of all the phenomena usually attending upon inflammatory action. The second I must acknowledge was somewhat of a conundrum to me at first, as it was also to my friend, Dr. John Piper, who, on my first visit, I took to see the case. But after several careful examinations,

and a narration of its history, and after excluding enlargement due to inflammation and hypertrophy of the natural muscular structures—an affection confined to advanced life almost entirely—I made the diagnosis of fibroid tumor, attached to and involving the left lobe. I was the more persuaded of its correctness by the impression conveyed to the finger by rectal touch. The left lobe felt as if it was divided into two distinct portions (a groove being distinctly appreciable to the finger), giving the impression that the prostate was composed of four lobes instead of three.

I have termed the injection of iodine in this case an experiment. I know of no case reported where its use in true fibroids has met with any practical results. Mr. S. M. Bradley, in a communication in the *Lancet*, reports its successful use in his hands in hypertrophied cervical glands, and in lymphomata, but these growths are, for the most part, glandular in their composition. I was not prepared to expect any beneficial results, for, according to present teachings, it is in the latter class of cases that the action of iodine is so favorably shown. Of ergot, I should have looked for good results, though not from personal experience, basing my faith upon the writings of Paul Vogt, Handelin, Ritchie and others. I was inclined to have some regrets that I had not tried ergot in this case, but the happy manner in which it has terminated, fully compensates for any regrets on that score.

In presenting this case, I do not do so to lay claim to any novel mode of treatment, for such it is not, at least, so far as the injections of iodine are concerned. Many cases are reported lauding it in the treatment of *glandular* growths. I have treated successfully two cases of such tumors in the neck by iodine injections within the last eight months. I report the case to call attention to the good and honest results in this case (which I think was *true fibroid*), and to solicit from my more experienced confreres the results of their labor in this direction, and with their method of medication. The prostate is, at the present writing (April 27, 1876), as far as can be determined by touch, restored to its normal condition.

ART. VI.—*Hydrate of Chloral in Neuralgia.* By G. A. BAXTER, M. D., Chattanooga, Tenn.

I desire to call the attention of the profession to a use of hydrate of chloral, which, until lately, was new to me, viz: its use as a counter-irritant—I might almost say, a specific, in neuralgia. The following cases give in full my experience with this drug, in the manner indicated, up to the present time. I report these cases more especially that the profession may confirm my own experience with it, and enlarge upon it. If my cases indicate an average experience in the management and success with this obstinate affliction, it is not much to claim for it a valuable place among the variety of remedies employed, with very imperfect success, in the treatment of this disease:

Case 1.—G. C., a drug clerk, æt. 23, has been affected at different times for three or four years with intense neuralgia in the supra-orbital branch of the trifacial nerve. He became accustomed at times to the free use of sedatives, especially the preparation of opium, and occasionally hydrate of chloral. In preparing some powders containing chloral for me, while suffering from this neuralgia, by chance he blistered himself over the affected nerve. The relief, after a minute or so of intense burning, was almost instantaneous and complete. The chloral left, for a day or two, a bronze-colored discoloration, which passed away, leaving the skin as before. He says that he has not been troubled anything like so severely as prior to the application, since that time; and twice since, by my orders, he has been relieved promptly in the same manner.

Case 2.—M. D., white, æt. 41 years, has suffered from neuralgia in both trifacial nerves in all their branches. "Since she was a girl has known nothing but pain continually." Has been operated upon once by the subcutaneous division of the nerve over the supra-orbital foramen, and has had some of her teeth extracted on account of her trouble. I applied hydrate of chloral solution over the points of exit of the nerves, from the cranium on both sides until she was severely blistered. She complained severely of the intense burning caused by the application, but experienced very great, though not entire relief. She came to me a day or two afterwards, and begged to have the application renewed, which request was complied with, and when she left she thanked me for the relief given her. More than a month has elapsed, and I do not think she has had a return of the pain.

Case 3.—J. G., negro boy, aged 21, hot-house gardener; says

he has suffered, at short intervals of time, since entering upon his present occupation (a year and a half ago) with supra-orbital neuralgia over both eyes. He applied to me a few days since for relief. I gave him a prescription for a few grains of hydrate of chloral, directing him to rub it over the seat of pain until it blistered. He came to me a day or two afterwards, saying he had done as I said, and had experienced some relief, but was then suffering intensely, and desired me to make the application for him. I did so, in the manner above described, with almost instant and complete relief. His eyes were filled with tears when he came (so great was the pain), but when he left my office, he was in laughter. I have seldom seen more sudden relief by the subcutaneous injection of morphine. He then told me that he had used a solution at the first application which had failed to blister him.

Whether my experience in these cases will hold good in a larger number of cases, remains to be seen. I am unable to say or even express an opinion yet whether the relief afforded is entirely due to counter-irritation, or whether counter-irritation is aided by the local sedative effect of the drug.

So far as the general circulation is concerned while the drug is applied in this way, I found no appreciable difference in the character of the pulse. I think it possible that the relief in these cases might be made permanent by hypodermic injection upon the nerve.

Clinical Reports.

Suppurative Keratitis—Onyx with Hypopyon—Paracentesis Corneæ, with the Hypodermic Syringe used as an Aspirator—Recovery. By BENJ. BLACKFORD, M. D., Lynchburg, Va.
Read before the Lynchburg Med. Assn. April 18, 1876.

On the 26th February, 1876, I was called to visit Mr. Jacob Kempf, aged 57 years, residing about 3 miles from Lynchburg, in Amherst county, of a delicate and broken-down constitution, who had been suffering for several weeks with a violent attack of suppurative keratitis of the right eye. His eye was very much swollen and inflamed; there was great intolerance of light, and excessive epiphora, with nocturnal exacerbations of intense pain over the supra-orbital region, which had prevented him

from sleeping or getting any rest except under the influence of large doses of laudanum. Upon an examination of the eye-ball, I found extensive chemosis, and a large superficial ulcer, covering nearly the whole extent of the central portion of the cornea, and also in its lower edge a small amount of effusion of pus between the lamellæ, which satisfied me that I was about to encounter an onyx in connection with the ulceration—a very common symptom in this form of keratitis, especially if the disease has been neglected for any length of time, and the patient is far advanced in life.

The debilitated and cachectic condition of his system, and his long continued suffering, prevented me from resorting to the usual active antiphlogistic treatment, and I determined to rely as much as possible upon a tonic and sedative course of treatment, with the hope of relieving the intensely severe neuralgia, which attends the formation of pus within the substance of the cornea.

I directed that a 2-grain solution of sulphate of atropia should be applied to the eye every four hours, and his eye to be bathed and syringed several times during the day with warm water; also, a 2-grain solution of nitrate of silver, to be applied twice, alternating with the application of the atropia, together with the protective-pressure bandage, and I gave him internally two grains of quinine, three times daily, and a quarter of a grain of morphia at night, to be repeated if it did not relieve the pain, together with a hot foot-bath at bed-time.

On the 1st of *March*, I visited Mr. Kempf again. He felt that the eye was better—not so painful—although there was not much evident change in its appearance. The effusion of pus had increased, but not to any great extent. Continued treatment.

March 3. There was an improvement in the appearance of the chemosis, but no relief of the excruciating pain in the eye-ball and around the supra-orbital region. Effusion of pus had greatly increased, almost reaching and covering the pupillary margin of the iris. Upon examination by the lateral method, I observed the posterior layer of the cornea bulging backwards, touching the lower border of the iris, and large flakes of lymph and pus floating about in the muddy, aqueous humor; no vision;

could only distinguish light from darkness ; pain in the eye and side of the head excruciating. Applied unguentum belladonnæ over orbital ridge and temples. Discontinued nitrate of silver.

I was now satisfied that I should be compelled to resort to the operation of *paracentesis corneæ* to let out the pus. On my next visit, I invited my friends, Drs. Bass and Spencer, to accompany me, who agreed with me that it would be necessary to perform the operation without delay, as otherwise there was no hope of relief. We regarded the prognosis, in all its bearings, exceedingly unfavorable. The posterior elastic laminæ had become involved ; general suppuration and distension of the globe was apprehended ; the corneal tissue could not much longer resist the tension, as it was evident that the purulent matter was being formed through Descemet's membrane, and becoming infiltrated in the anterior chamber producing an *onyx* with *hypopyon*.

Mr. Hutchinson, in his report of cases treated in the Moorefield Ophthalmic Hospital, published in a recent number of the *Lancet*, reports "that in a large majority of cases, corneal ulcers, with hypopyon, if seen at an early stage, will do perfectly well if the patient be put to bed, and the eye fomented constantly with hot belladonna solution ; but it must be kept almost literally constant, and as hot as the patient can bear it." Hot fomentations are certainly very beneficial, unless there be considerable congestion and chemosis of the conjunctivæ, as was certainly the case with this patient. And I thought of resorting to that mode of treatment, but was fearful of augmenting the blood stasis, and reducing still further the already defective supply of nutritive material to the cornea, and consequently hastening its destruction. I think Mr. Hutchinson's experience refers more particularly to recent cases in young and healthy subjects, under the rigid discipline of hospital treatment. In this case I did not feel disposed to risk the delay of the remedial effects of hot fomentations, and determined to perform the operation and diminish the tension of the inflamed cornea, and, at the same time, evacuate the hypopyon.

Assisted by Drs. Bass and Spencer, the patient was put under the influence of chloroform, and I passed a lance-shaped knife obliquely through the cornea, from the lower and outer edge, upwards into the anterior chamber, making an opening from one

and a half to two lines long. There was immediate escape of a considerable quantity of purulent matter, and a small quantity of aqueous humor. Finding that it did not continue to escape as freely as I desired (owing to the viscid and cheese-like character of the pus lying in contact with the anterior laminae of the cornea), I determined to use the hypodermic syringe as an aspirator. I had previously had the bevelled point of one of the needles of my syringe shortened and sharpened, intending to puncture the abscess with it, instead of using the knife. I passed the needle through the opening into the anterior chamber, and drew off a quantity of the pus remaining, leaving a small quantity in the lower border of the chamber, which seemed to be too viscid to be drawn out through the needle of the syringe. After several unsuccessful attempts to draw this matter out, I concluded, at the suggestion of my friends, to leave it, without using a scoop, and repeat the operation in a few days, if it should be deemed necessary, or rely upon its becoming absorbed. There was no shrinkage of the cornea; the ulcer was rendered more distinct by the evacuation of the pus; the amount of aqueous humor that escaped was small. The patient was put to bed, and the solution of atropia dropped in the eye, and the protective-bandage applied. We left with directions that he should be kept perfectly quiet, and the atropia applied every three hours; also, a dose of morphia to be taken at night.

March 8.—Patient had a good night's sleep—the only comfortable rest he has had for over two weeks—his eye feeling and looking much better; the ulcer greatly improved. Continued the application of the atropine and protective-bandage, and gave him internally 10 drops of syrup of iodide of iron, in addition to quinine three times daily. There was considerable diminution of the purulent matter, which had doubtless escaped through the opening in the cornea; notwithstanding, I could scarcely trace any evidences of the incision, as it seemed to be completely closed.

March 10. The condition and appearance of the eye decidedly improved; cornea clearing up; the ulcer rapidly improving and diminishing in size; no shrinkage of the cornea; the iris assuming a more healthy appearance, except in the lower border of its pupillary margin, which presents an uneven and spotted

appearance—doubtless the result of long-continued hyperæmia, superinduced by the violence of the keratitis and contact of pus. This condition of the iris induced me to apprehend, to some extent, posterior synechia. The chemosis much more healthy in appearance, and rapidly disappearing, and the aqueous humor becoming less turbid.

March 12. Improvement continues; absorption of the pus going on rapidly. Vision improving; he can recognize a person four or five feet from him; ulcer almost entirely healed. Treatment continued. Little or no pain in the eye; sleeps well, and has a good appetite, which I permit him to indulge to the fullest extent, with nutritious diet.

March 15. The pus almost entirely absorbed; a few small flakes only are seen floating in the aqueous humor. The iris much more healthy; the hyperæmia diminishing; no trace of the ulcer. Cornea cleared up, with the exception of a small nebula, which does not reach the axis of vision. Conjunctiva and sclerotic coat have assumed their normal healthy appearance.

April 1. It has been over ten days since I visited Mr. Kempf, and I find that his improvement, not only of his eye, but of his general health as well, has been wonderful, although there is some slight distortion of the pupil (rather oval-shaped); his vision has sufficiently improved to enable him to walk out on his farm; the nebula on the cornea has become more transparent, and I am hopeful of its becoming absorbed.

Since the cornea and aqueous humor have become almost entirely cleared up, and a more thorough and satisfactory examination of the iris can be made, the apprehension of the formation of a partial posterior synechia, I regret to say, will be realized. The somewhat distorted pupil, and the uneven appearances of the lower pupillary margin of the iris, alluded to, are only the excrescences or *papillary* outgrowths, spoken of by more recent authors, which play so important a part with the adhesions of the iris to the capsule. There is scarcely an iritis of a severe character, and especially one accompanied by a hypopyon, in which there is not this development of papillary excrescences on the pupillary margin—to say nothing of the degenerative atrophy of the iris—that might occur after so severe an ordeal. Fortu-

nately in this case, the absolute removal of the pus from prolonged contact with the borders of the iris, prevented this degenerative atrophy; and I am hopeful that, under the action of returning muscular power of the iris, these excrescences on the pupillary margin may recede, or, rather, be torn away, and cease to maintain the posterior synechia, which they have caused. The indication to be fulfilled now, in carrying out the treatment, is the continued use of mydriatics, with the hope of breaking up, to as great an extent as possible, the adhesions, and prevent the formation of a permanent synechia. Hence, I have determined to increase the strength of the solution of the sulphate of atropia to gr. iv to the $\bar{3}$ j of water, to be applied twice daily.

Stellwag says: "Of course, in a true and complete iritis, the effect of the mydriatics is not observed at once to a marked degree. A dilatation of the pupil only occurs when the inflammation proper has passed over its point of culmination, and the muscular fibres, under the retrocession of the newly-formed elements, have again become capable of performing their functions. But it is not possible to exactly fix the time of the appearance of these conditions, and every delay is punished by increasing firmness of the adhesions and difficulty in removing them. The timely use of the mydriatic has for its object, aside from its effect in lessening irritation, the preparation of a way for the enlargement of the pupil, in order to accomplish this at the moment when the muscular fibres have obtained the necessary freedom."

April 8. Accompanied by Dr. Spencer, I visited Mr. K. on the eighth day after increasing the strength of the atropia. The *nebula* has considerably diminished in size, and the opacity is lessened. Although he still complains of his sight being "slightly smoky," it, however, has greatly improved since my last visit. The distortion of the pupil is diminishing, and is assuming a more natural and normal appearance. The papillary excrescences of the "ragged edge" seem to have diminished in their extent along the pupillary margin of the iris, indicating that the adhesions have been, to some extent, broken up. The pupil responds to the action of the atropia, and I shall keep it under its influence until the muscular fibres are capable of performing their functions, and the lower portion of the pupillary margin is free, or until the remedy has proven itself to be in-

sufficient. His vision has so far improved as to enable him to read, as a test, with his glasses, with the affected eye, "Hostetter's Almanac," the type of which corresponds with Nos. 3 and 4 Jäger, and he can recognize persons passing along the road, some 15 or 20 yards from his door.

It is proper to state, in this connection, that some four or five years ago, Mr. K. received an injury of the left eye, from which resulted an opacity of the cornea, rendering vision very imperfect in that eye; and, of course, his condition would be very deplorable should he be so unfortunate as to lose entirely the sight of the eye which has been under treatment.

By keeping the pupil dilated with the application of mydriatics for as long a time as possible, I hope to be able to break up the bands of adhesion and to separate the partial posterior synechia, thus keeping the divided parts away from each other, preventing their re-union, and obviating the necessity of resorting to the operation of corelysis, as recommended by Mr. Streatfield, or iridotomy. It is better, in my judgment, to let well enough alone. At present, there are no evidences of any iritic depositions on the pupil, or any neoplastic formations within the capsule; no immobility of the pupil, and hence no loss of the power of accommodation. Whether there will be any relapse, with its accompanying dangers, remains to be seen.

I have thus written out a full, detailed report from my notes of this interesting case—interesting not only on account of its unpromising character in every respect, but the favorable results which have been attained under the treatment adopted. I have endeavored to state as accurately as I could all the symptoms, both favorable and unfavorable, developed during the progress of the disease. It is now well known that the old views of the absorbent powers of the preparations of iodine and mercurials, especially in hypopyon, have changed much in modern times, and the direct evacuation of pus by the operation of paracentesis of the cornea is gaining more friends, and exceeds all others in efficacy, more particularly when there is great disturbance of the circulation and nervous system.

Lastly, to quote again from Stellwag, "The favorable results and relative want of danger of the paracentesis have led, as will be understood, to a greater frequency in its indication. In later

times the operation in question is said to be one absolutely indicated in depositions of pus in the smallest hypopyon, and even when the aqueous humor is only turbid. There is nothing really to be urged against this, especially in those cases in which the inflammation is still progressive, and we may expect an increase of the pus in the chamber. But no objection can be made to some delay, since it is well known that a small hypopyon often disappears spontaneously in the shortest time, without leaving behind any evil results. Paracentesis has, on the one hand, a favorable effect by evacuating the pus directly from the aqueous chamber, and thus preventing the flocculent coagulations which resist absorption from being developed on the walls of the chamber and there consolidating. On the other side, the diminution of the intra-ocular pressure is not to be too lightly estimated."

April 18. Mr. K's improvement continues; his vision much improved. The partial posterior synechia has been broken up to such an extent as to render the distortion of the pupil *unnoticeable* at a short distance, and I regard his recovery sufficiently far advanced to enable me to make this report, although I shall continue treatment a while longer.

Nocturnal Horrors (Hysterical) due to Non-Removal of Secundines. By E. C. BARRETT, M. D., Jerusalem, Va.

I have witnessed many cases of hysteria, but in no instance before have I known it to assume the shape of night horrors.

I was invited a few weeks ago to visit a young married lady, who was afflicted with this disease in the form above alluded to; and from her feelings as detailed to me, she must have been the victim of the most terrible and exquisite suffering. She had, about twenty days previous been confined in child-bed, and to the bad management of the midwife on the occasion, I attribute the distressing and untoward sequelæ as herein briefly stated.

Upon entering her chamber, I was profoundly impressed with her beauty and intelligence. She was quite weak and feeble, and from the much flooding which had supervened since her accouchement, was very anæmic. I expected, of course, to find the action of the heart excessive, as the result of the excitement of debility; but I was disappointed in this; for, after proper examination, I found there was a peculiar tardiness and want of

force in the circulation—the pulse beats being only 45 a minute. The skin was cool and waxy, with a countenance wearing the impress of care and pain; the tongue was pale and shining; the bowels were stubbornly constipated; in short, there was such a general unhinging of the entire organism, that I knew there was a physical cause of her condition.

On examination per vaginam, I found that the whole difficulty rested in derangement of the uterus—that all of the psychical phenomena, having remarkable regularity in their nightly recurrence, attended with discomfiture that language is inadequate to describe—feeling sometimes that her child was being murdered, that the house was on fire, that death itself was throttling her—all such feelings and more went to make up the great agony of mind in her affliction. There was no relief from this condition, save in the painful necessity of keeping the patient continuously awake.

During this vaginal examination, I discovered a dark, ichorous, and very offensive discharge oozing from the vulva, which, on further examination, I found lying upon the floor of the upper third of the vagina. In the mouth of the womb, a soft, pulpy substance was seen, which I first took to be a coagulum, but which, after its removal, I recognized was a part of the placenta which had been left by the careless and incompetent midwife who had had her in charge—all of which gave me an insight as to the cause of her trouble.

To remove the foreign body was my first step; after which, I washed with a female syringe the parts thoroughly with warm water and soap; after that, I injected a weak solution of carbolic acid. The latter agent did not only disinfect the foul and offensive fœtor around the genital regions, but the uterus, not seeming to have lost its inherent vitality, notwithstanding the general debility of the patient, at once contracted as firmly and as permanently, as it would doubtless have done, had the secundines been properly taken away at first.

While I thought that the prime cause had been removed, and that her nervous symptoms depended upon the presence of the retained body, yet I deemed further treatment necessary to control her *habitual* night horrors. I accordingly gave her valerianate of iron and quinine, each one grain every two hours

during the day time only; at night, to secure sleep, I stopped the former, and gave instead, gr. $1\frac{1}{4}$ of sulphate of morphine, mixed with gr. ij sulphate of quinine. In the course of thirty minutes, she fell asleep; and from the ease and complacency of expression, I thought that she would not be troubled with one of her recurring paroxysms. Not long afterwards, however, I noticed agitation, evinced by movements, which were accompanied by occasional mutterings. On observing this, I woke her, and inquired if she was not suffering with one of her unpleasant dreams—she replied “no,” and was sorry that I had disturbed her! that though she was dreaming, instead of its being unpleasant, she was enjoying a most beautiful and delightful translation. Thinking that it might have been the effect of the morphine, in changing the character of her delusions from frantic fear to a pleasant ecstasy, I gave her in one dose, gr. x. of valerianate of ammonia, from which, in fifteen minutes, she again fell asleep, and enjoyed a full night of unremitting repose.

The next morning, I could clearly see from her general mien, that her whole physical and nervous organization had undergone a great change for the better. Her heart, which had been tied down to 45 beats a minute, had reacted, and was beating regularly and healthily about 70 per minute. The skin seemed to have doffed its peculiar waxyness, and had assumed a pleasant warmth. The eyes, which had given evidence of suffering, became bright and cheerful; in short, the woman was entirely renovated. The stinking decomposed placenta was removed, and the chain of morbid influences had been broken; while the mind, which had almost succumbed to the ravages of its foul associations, was relieved by sleep.

In order to guard against any return of the nocturnal paroxysms, I continued the nervines for six consecutive nights, prescribing nothing in the day, but ten drops of muriated tincture of iron, at morning, noon, and sunset, with such articles of diet as are generally suggested, with a view to physical repair. I found that clysters acted finely. In ten days from the time of my first call, I discharged my patient, considering her perfectly restored.

This case has been mentioned to show first, the very unusual

phenomena which its details make prominent; to what extent the nervous system is capable of yielding to external impressions, and after these influences have been withdrawn, to see its rapid powers of recuperation; and lastly, but not least, to call the attention of young practitioners to the importance of removing every particle of secundines in cases of child-birth.

A Case of Malarial Gangrene of the Feet. By GEORGE W. CHRISTIAN, M. D., Weimer, Texas.

As but few cases of malarial gangrene have been reported, I may be pardoned for calling your attention to one that occurred under my observation.

In the early part of last fall, I saw at the request of some young men of philanthropic minds, a pauper in the manger of our town livery stable. I found a man some 28 years of age, a Dane by birth, who had been in this country six or eight years, and was by occupation a laborer. He was about five feet and ten inches high, and weighed about 160 lbs.; light hair, blue eyes, and naturally fair complexion, though sallow now, the malarial cachexia being well marked. Had worked during the summer on the Colorado river, a stream notorious as a home for miasmatic diseases.

I found him lying in a little straw, in a semi-comatose state. His feet and hands were cold, though his body was above the healthy standard. Pulse very feeble and intermittent; bowels loose, judging from what I could see; tongue rather dry, and deeply coated with a dirty brownish fur. I could arouse him only to a slight degree of consciousness, not sufficient to gain any information from him.

I learned from the bystanders that the party had been found late in the evening (it was now about 8 P. M.), on the street, and that he had been there three days and nights in the hot sun of day, without the least shade, and with nothing to protect him at night from the cold damp winds, which are so prevalent here at this season. Had had no water to quench his thirst, or cool his parching tongue, nor food to sustain his waisting strength. I had him moved to comfortable quarters, and ordered quinine and brandy internally, besides friction with mus-

tard to the feet and hands until reaction should take place. At this juncture another disciple of Hippocrates put in his appearance, saying that he had visited the man in the manger, and by priority he was his patient. So after mentioning my ignorance of his visit, I made my exit. I had, however, been assured of the fact that the party had neither friends nor money.

I saw the man incidentally on the next morning; he had reacted well, had but little fever, and some appetite for food. I was satisfied, notwithstanding the exposure he had just passed through, that with quinine freely, and small portions of mercury, (calomel) judiciously administered, he would soon recover. I lost sight of the patient here for six or seven days; what treatment he got I never inquired; that it was anything else than proper I feel confident.

When I next saw the patient some six days after first visit, he had been moved from some cause into very uncomfortable lodgings—in a carpenter's shop, open at both ends, facing the north, giving the north winds, which had now begun, free access to him. Patient had emaciated rapidly, had a slow continued fever, a dry red tongue, with frequent stools. His feet were naked and icy cold, with dark patches about the ankles, and a little above on his leg. I advised his adviser to give him wine, brandy, and good nourishment, carefully watching to see that they were given in small quantities, and often repeated; to poultice his feet and legs with mustard and pepper; to check his bowels with a turpentine mixture containing opium.

His physician informed me now, that he would leave the next day, and that he would like to have me treat the man while he was absent. I called about 11 A. M. next day, according to promise. Patient had had no nourishment nor medicine through the night, nor up to this time in the day—had had no brandy, wine, or any other stimulant, except a turpentine emulsion, which he had helped himself to. Had a bread, mustard and pepper poultice to his feet, which had been on now twenty-four hours—quite cold in this time as there was no animal heat. It may have been put on cold. It was clear now that the patient would lose both feet; gangrene was well defined. I again moved the unfortunate sufferer to a comfortable room, had him dressed with clean clothes (he smelt very badly by this time be-

tween the gangrene and fœces, which he had been discharging for a week and over in his clothes), and put a fly blister around both legs, letting it extend well up over the healthy flesh. I hoped by this means to check the gangrene and establish a line of demarkation. I used at the same time artificial warmth to the extremities; gave internally wine, beef tea, tonic doses of quinine, and an occasional dose of morphine, with turpentine emulsion to control bowels and quiet restlessness. Patient improved wonderfully, acquiring strength daily. His appetite, strange to say, in such a condition, improved so much that he actually wanted to eat.

I found the patient on the second day, in the evening, sitting up in bed, talking cheerfully to his nurse of his prospects of recovery. The line of demarkation on one leg was well marked, and there was every encouragement that in another day or two both would be so, and that the patient would have sufficient strength in that time to stand the amputation.

On the third day he got up and walked across the room, and sat up a good deal on the bed, contrary to my directions. He informed me on my visit late in the evening that he had been setting up an hour or two, and that he had walked to the door of his room. He thought that I was in error about his legs having to come off; he did not care to give them up as long as he could walk on them, if they were dead. He was taken with difficult respiration in the early part of the night, evidently from fatigue. I gave a quarter grain of morphine, which quieted him for the night, but he grew rapidly worse, and expired on the next night about midnight. The gangrene had reached about half-way from his ankle to the knee, and the skin and some flesh had sloughed off before death.

There had been no previous injury about his feet or legs; his habits were generally good, though he had been on a drunk the day before he was taken with fever. Had no vice of constitution, had never had syphilis, and his family record was good.

This was evidently to my mind a case of genuine malarial gangrene. His disease ran about the same course that many others would if left to the unaided powers of nature, with no antidote to the malarial influence. Strange that he lived as long as he did, about two weeks, under the circumstances.

Original Translations.

From the German and French. By WM. C. DABNEY, M. D.,
Charlottesville, Va.

Gunshot Wounds of the Elbow-Joint, and the Result of their Treatment During the late Franco-Prussian War.—The *Deutsche Militärärztliche Zeitschrift*, Heft I, 1876, contains an article on the above subject by Dr. Dominik, of Potsdam. The following are the conclusions at which he arrives :

1. Of all the joints of the human body, the elbow is the one most liable to gunshot injuries.

2. The right elbow-joint is more frequently wounded than the left.

3. The conservative expectant treatment of gunshot wounds of the elbow-joint gave, during the late war, more unfavorable results than resection—indeed, so far as could be determined from the small number of observations, conservative treatment gave better results only when the injuries were slight.

4. Conservative treatment almost always resulted in ankylosis of the joint; a good degree of motion was rarely obtained, and then only in mild cases, in wounds of the capsule without injury to the bone.

5. Resection of the elbow-joint is generally a safer operation than amputation of the upper arm (mortality after resection, 23.8 per cent.; after amputation of arm in consequence of gunshot wounds of the elbow-joint, 35 per cent.).

6. Primary resections (resections on the 1st and 2d day) did not give such favorable results in the Franco-Prussian war, with respect to either life or function as in previous campaigns; they gave less favorable results during this war in both respects than resections practised at a later stage.

7. Intermediate resections (from the third to the sixth day) are not to be so unqualifiedly condemned as most surgeons have done heretofore.

8. Partial resections are, when they are possible, to be preferred to total resections, since they give a better vital and functional prognosis.

9. Resections of the elbow-joint in the war of 1870–71 gave

the following functional results: 52 per cent. more or less favorable; 49 per cent. of ankylosis, and only 24.4 per cent. of "shaking arms" (Schlotherarme) [from removal of the bones and ligamentous parts and supports of the joints].

10. The primary resections furnished the greatest number of such "shaking" arms.

11. The total secondary resections give the most favorable functional results of resection of the elbow-joint; the total primary resections give the worst results in this respect.

12. After partial resections, slight ankylosis occurs, and occasionally a "shaky" joint, but much more rarely than after total resections.

13. Most of the cases in which this too great mobility or shaking of the limb has occurred have been found to be in partial resections, when the epiphysis of the humerus has been removed.

14. Resection of the bones of the forearm, the epiphysis of the humerus being left, gave excellent vital and good functional results.

15. Resection of one bone of the forearm gives a low rate of mortality, but ankylosis generally occurs in such cases.

16. Lessening of the good effects of resection after a few years was not observed after the late war; on the contrary, a greater or less increase in the power of using the resected arm was observed.

17. Amputation of the arm, practised after previous resection of the elbow joint, showed twice as great a death-rate as amputation in the same situation from other causes during the late war.

18. Amputations of the arm after gunshot wounds of the elbow-joint, showed a greater rate of mortality than amputations of the arm after wounds in other situations.

19. Amputations of the arm, practised within the first twenty-four hours after the wound was received, gave the best results; those on the second day, the worst results.

20. The mortality after the first named amputations is a little less than the general average after resection of the elbow-joint (22.1 per cent., against 23.8 per cent.).

Progressive Pernicious Anæmia.—In *Le Progrès Médical* for

April 15th, 1876, there appeared a very interesting review of our present knowledge of this singular affection by Dr. E. Brissand, from which we take the following: The first person who called attention to this diseased condition was Gusserow, in 1871. Since that time quite a number of articles have appeared on the subject.

The essential characters of the disease may be briefly stated, as follows: 1. Total absence of apparent cause. 2. Excessive poverty of the blood, accompanied by considerable disturbances of the circulatory apparatus; rapidly progressing debility. 3. Febrile action, which cannot be explained by the anatomical condition of the organs of the body. 4. Progressive character of the anæmia and its pernicious nature, for as yet all therapeutic means have been powerless to check the disease. 5. Absence of atrophy of the organs; preservation of the adipose tissue intact; absence of leukæmia; and enlargement of the spleen or lymphatic ganglia.

There are other symptoms not invariably present, but still very commonly observed, which may be classed as secondary symptoms; such are vertigo, palpitation (of the heart), certain psychic phenomena, which are seen in cases of extreme anæmia; finally, hæmorrhages, which may occur in all the organs, but especially in the retina. Although more frequent in women, yet, like chlorosis, it attacks men also, and chiefly during adult life. The ordinary causes of anæmia may be considered predisposing conditions; repeated pregnancies at short intervals appear to have had, in some instances, a possible influence on the development of the disease. Some cases seem justly attributable to an endemic influence; but very frequently persons in perfect health are attacked without any assignable cause. The onset is almost always insidious. In pregnant women fever is sometimes observed. Then, sooner or later, there comes an extreme pallor of the surface, nutrition remaining apparently normal. Emaciation, a rare occurrence, only appears late, when death is imminent, and when the fever is considerable. Palpitation of the heart is often violent, and movement causes sometimes extreme dyspnœa. Dyspeptic symptoms occasionally arise. The patient becomes profoundly apathetic. The organs of sense lose their delicate sensitiveness; the sense of hearing is lessened in some

cases to a very marked extent. Next come vertigo, hallucinations, &c., and then febrile action, having no apparent connection with the preceding phenomena. The temperature rarely exceeds 40°C . [104°F .]. The frequency of the pulse bears no regular relation to the temperature. Finally, the period of hæmorrhages arrives. They occur on mucous surfaces, in serous cavities, in the nervous centres, in the muscles, and almost always in the retina. These latter are, according to Bornier, of very great importance; they sometimes come on at an earlier stage, and may even precede the other symptoms altogether.

In the latter stages of the affection, dropsy supervenes, and it is so considerable as to suggest disease of the kidneys; but this is not the case. The urine seldom, if ever, contains albumen. The relative proportion of red and white globules remains normal, but the total number of these elements is greatly diminished.

Among the physical signs of this disease abnormal sounds in the heart or great vessels are the most prominent, and, indeed, these are sometimes so marked as to cause the belief that there is some valvular disease.

Death is the invariable result of this progressive pernicious anæmia. It generally supervenes after some weeks of illness, when the affection has come on during pregnancy. In other cases, it progresses slowly, and may last for many months.

On *post mortem* examination, there is found extreme pallor of all the mucous membranes, and decoloration of the blood itself. The lungs are permeable to air, but filled with serous effusion. Sometimes little hæmorrhagic points are observed on their surface. The pleura is the seat of an effusion more or less abundant, and sometimes sero-sanguinolent. The pericardium presents similar lesions. The heart is slightly dilated, of a yellowish color, and also presents yellow, fatty patches. In some cases the muscular substance, and even the papillary muscles exhibit a number of small hæmorrhagic foci. The valves are generally healthy. Fatty degeneration of the heart was present in all or nearly all of the cases which have been reported, and is quite characteristic of the affection. [Pouffick calls the disease "*Fettherz*"—fatty heart.]

A number of cases have been reported where the clinical his-

tory was similar to that of progressive pernicious anæmia, and in which fatty degeneration of the heart was observed on *post mortem* examination. The experiments of Perl and of Virchow on dogs seem to show that the fatty degeneration of the heart was secondary to, and caused by the anæmia. Perl found after copious bleedings of these animals that fatty deprivation of the heart occurred, and it progressed more rapidly, and was more marked in proportion to the amount of blood lost, and the frequency with which the venesections were repeated.

In the circulatory apparatus, other lesions were found which were quite characteristic. The most important was a fatty degeneration of the walls of the arteries, especially the muscular coat. Outside of the small vessels were frequently found many small cells, and altered blood corpuscles. These appearances were observed in all the organs—the brain, intestines, liver, and heart itself.

The abdominal viscera presented no characteristic changes; but it was observed that in many of the cases a considerable hypertrophy of the mesenteric ganglia existed.

With reference to the brain, the nervous elements were preserved intact, but the neuroglia was found filled with nuclei. Besides this, a singular condition of the blood-vessels in this organ was observed. They were dilated at certain points; their walls had undergone fatty degeneration; and at the dilated points, the blood had accumulated in considerable quantity, and outside of them were found a number of hæmorrhagic points.

The hæmorrhages are not constant in progressive pernicious anæmia; they are most frequently observed in the retina, where they may be seen during life by the ophthalmoscope, and are generally most numerous in the neighborhood of the papilla, which is itself filled with blood-corpuscles.

One other pathological condition has been observed in these cases, which has been described by Dr. William Pepper [*American Journal Med. Sciences*, Oct. 1875], which has also been observed by several other writers on this subject. It consists in a peculiar change in the marrow of the bones. Dr. Pepper examined the marrow of the radius and sternum, which seemed to the naked eye paler than in health. Under the microscope it seemed formed of round granular cells, sometimes containing

fat, and which treated by acetic acid, showed a well defined nucleus, sometimes granular. The cells were from $\frac{1}{3500}$ to $\frac{1}{2000}$ of an inch in diameter. Kelsch, in 1873, reported a very interesting case of myelogenic pseudo-leukæmia, in which there was observed a hyperplasia of the lymphatic tissue of the marrow of the bones.

Dr. Brissand thinks that this is all that is at present known of this malady, but he promises to return to the subject at some future time, when further observations on the subject have been made.

Correspondence.

Iron and Alum Mass.

Mr. Editor,—Frequent inquiries having been made of me as to the efficacy of the Alum Mass manufactured from the Alum Springs of this county as a remedial agent, I have concluded to answer briefly through your valuable journal.

I do not regard the alum mass, or the water from which it is made, as a specific for any disease; but I do regard it as a most valuable addition to our list of remedies. Any intelligent physician, after seeing the analysis of Prof. Mallet (University of Virginia), of the alum mass, will at once see in what classes of disease it is most likely to prove beneficial. But it will occasionally do more than its chemical constituents would seem to claim for it.

I was called some years ago to see a little girl of eight summers; she had a feeble and frequent pulse, severe cough, with copious expectoration of purulent matter, hectic flush every day, and regular night sweats. The symptoms pointed to consumption, and more than one physician gave the opinion that she was dying of tuberculosis. After going through with the catalogue of remedies for such a condition—cod liver oil, iron, brandy, tonics and alteratives generally—she was found to be still losing strength and flesh. It was then determined to send her to drink the alum water, which she drank for two weeks, and enough was hauled home for her to use about a month. At the end of this time she found no further necessity for it; and

now she is one of the stoutest and handsomest young women in the county.

I have seen many other cases of a scrofulous nature where the benefit derived from the use of the water, and mass made from the same, was most striking.

E. M. CAMPBELL, M. D.

Abingdon, Washington County, Va., May 8th, 1876.

Proceedings of Societies.

RICHMOND ACADEMY OF MEDICINE.

April 20.—**Delegates to American Medical Association**, to convene in Philadelphia June 6th, appointed by the President: Drs. J. S. Wellford, F. D. Cunningham, James Beale, Christopher Tompkins, J. N. Upshur and E. T. Robinson.

Foreign Body in External Meatus Auditorius.—Dr. Cunningham exhibited the ivory head of a lead pencil which he had removed from the external auditory meatus of a gentleman, where it had remained for fifteen years without producing suppurative inflammation.

Dr. W. W. Parker had seen a boy who had put a pebble in the external meatus years before. The boy resisted so much that the pebble was not removed, but no inflammatory trouble resulted.

Croton Oil.—Dr. J. N. Upshur was recently called to two children, 1 and 3 years old respectively, each of whom had playfully swallowed about a drachm and a half of croton oil. The elder child soon vomited freely, and was not sick much. The younger child vomited, but not freely. The medicine purged violently—the evacuations being very large, watery and white. Bismuth, in ten-grain doses, was administered, with teaspoonful doses of brandy every half hour. The mouths of both children were very sore. Both patients recovered.

Dr. F. B. Watkins had feared croton oil for many years, having been taught that very small doses simply placed on the tongue would purge violently. Lately, however, he has used it in combination, especially with rhubarb and jalap, as a mild and safe purgative. Dr. George W. Harris, of this city, first inspired him with confidence in its general therapeutic action. This gentleman prescribes a pill containing one drop of croton oil for bilious colic—one to be taken every hour until relieved—with excellent, speedy results.

Dr. E. T. Robinson remarked that the so-called "castor oil capsules" in the shops contain full doses of croton oil. He believes that croton oil is as generally free of adulteration as any of the commonly used agents.

Dr. Upshur had found the medicine always to act promptly. A policeman with bilious headache, to whom he gave two pills—each containing croton oil, gtt. ss, and calomel, gr. j—the second pill being administered two hours after the first—had 15 fœcal evacuations as the result. He had also seen a case of dysentery, terminating fatally, induced by the medicinal use of the agent.

Dr. W. W. Parker thinks croton oil valuable when patients are not easily affected by medicine; but he never gives it to new patients except with extreme caution.

Dr. E. T. Robinson had seen a case in which croton oil was used as a hair oil. There was a "slow recovery."

Dr. Cunningham had used croton oil successfully in a case of sciatica, as suggested by Prof. Thompson, of New York, and to which Dr. Edwards called attention some time ago.

Tape Worm.—Dr. L. B. Edwards reported the case of a patient who had, in the past three or four months, passed about 45 yards of tape worm. From the history of the case, it seems probable that the worm began to be developed while the patient was a Confederate soldier. The longest fragment of the worm passed at any one time was about 12 feet. Segments of from one half inch to a few inches in length are discharged at almost every stool. No apparent benefit has been derived from the use of kooso, male fern, or purgatives. Tablespoonful doses of turpentine at one time seemed to promise complete relief; but it was continued for weeks with purgatives and milk diet, and given before breakfast, without doing further good. For the past three weeks, the patient has been using pumpkin seed tea, but still the segments are discharged, just as is the case when no medicine is used. Whiskey always relieves the intolerable gnawing sensation in the stomach, and seems to cause a more brisk discharge of the segments; but the dangers of the long-continued use of this remedy are too great to justify its indiscriminate use. This is the second case of tape worm that the Doctor has ever seen—the other case being during his hospital experience in New York, in 1867. [Since the report of this case, the patient has continued irregularly the use of pumpkin seed tea; all the symptoms have improved, and he has not had any further evidence that any portion of a worm has been discharged. He now thinks himself well. The reporter does not

know whether he is freed of the trouble or not. The head of the worm has not been discovered.]

The President, Dr. R. T. Coleman, remarked that he had never had a case of tape worm in his practice of over twenty years.

Dr. E. T. Robinson had a case some time ago, attributable to eating Bologna sausage. Treatment successful, fluid extract of male fern.

Dr. George Ross had had a case. Treatment successful, active purgation, turpentine and pumpkin seed tea.

Large Non-Fatal Dose of Chloral Hydrate.—Dr. J. S. Wellford was called to a child 3 years old, who had accidentally taken twenty grains of chloral hydrate in solution. The child slept calmly and awoke refreshed, without receiving any treatment.

May 4.—Puerperal Fever—Fatal.—Dr. F. B. Watkins reported a case of puerperal fever following second confinement. The labor was tedious, but the child was unexpectedly expelled by a single pain on a Monday night. Dr. W. was called in consultation on Wednesday, when the pulse was sharp, quick and hard; there was also general abdominal tenderness and tympanitis; constipation; patient on back, with flexed thighs. The lochia had been sufficient during the whole time; os uteri painfully sensitive to touch. On the fifth day, the lower limbs were drawn up on the abdomen; even the weight of the bed sheets gave pain. The lochia still abundant, but the pulse was neither very hard nor rapid. There was seen a slight inflammatory blush on the inside of the thigh, which was attributed to excoriation by carbolic acid; otherwise, the inflammation was erysipelatous. Besides the carbolic acid solution wash, a large blister had been made over the abdomen before the appearance of the inflammation spoken of. Quinine was the principal internal medicine. There was no headache, nor nausea, nor unusual restlessness, and the remedies acted well, except to cure the patient. In other words, she died of exhaustion. The pulse beat was 140 a short while before dissolution, and dropped to 100; the use of veratrum viride at this stage carried the pulse up to 140 again, but the patient was exhausted.

Dr. W. W. Parker thought Dr. Watkins' case one of metritis.

Dr. M. L. James reported the result of an autopsy, in which he found the peritoneal coat covered with inflammatory lesions, such as lymph, ulcerations, &c. The lungs, pleura, kidneys and brain were all congested. Before death there had been no marked symptom of peritoneal disease—the symptoms consisting

rather of mental flightiness, and only slight tenderness on pressure over the abdomen.

Dr. R. T. Coleman thought the case reported by Dr. Watkins one of puerperal fever. He believes this disease to be due to zymosis, which expresses itself differently in different persons and in different epidemics. He has just been fighting this disease in a patient whose pulse started at 130. The castor oil which she had taken on the third day operated profoundly; on the fourth day, she got up to stool six or seven times. The patient is now convalescing. He attaches great importance to antizymotic remedies. The irritability of the bowels in the case under his charge forbade the use of sulphite of soda. Hence, large doses of quinine and mercurials were used. After the quinine (grs. xxx per diem) had impressed the nervous system, veratrum viride was given to allay the excitement.

Dr. L. S. Joynes inquired as to whether or not we had any substantial evidence as to the efficacy of sulphite of soda? It is probably used because it is antiseptic; but puerperal fever may be zymotic without being due to a septic poison.

Dr. Coleman had seen very little literature on the subject. He commenced the use of sulphite of soda some seven or eight years ago, and has seen some recoveries under its use that he does not think would have resulted from any other treatment known to him.

Dr. J. B. McCaw remarked that sulphites and hyposulphites act as antiseptics because of the absorption of oxygen in the stomach, and thus become sulphates. Undoubtedly sulphites are invaluable as antiputrescents, for they check the process of fermentation.

Dr. Coleman does not regard the stomach as a chemist's retort. Hydrochloric acid exists in the stomach, and yet we give calomel without fear of injurious chemical changes taking place.

Dr. E. T. Robinson thinks sulphite of soda may be absorbed, and that the antizymotic or antiseptic changes may occur in the blood.

Dr. Cunningham began the use of sulphite of soda seven years ago, and he has had no reason to change his conviction that it has real value in puerperal fever.

ABINGDON ACADEMY OF MEDICINE.

[Reported by Dr. W. F. Barr.]

At the last annual meeting of this Association, the following officers were elected for the ensuing year: Dr. R. J. Preston, President; Drs. Jas. F. Pendleton and Wm. L. Dunn, Vice

Presidents; Dr. W. F. Barr, Corresponding Secretary; Dr. George Ben. Johnston, Recording Secretary; Dr. H. M. Grant, Treasurer.

On motion, Dr. G. Ben. Johnston was elected a Fellow of the Academy.

The following physicians living in Virginia were elected honorary fellows: Drs. R. S. Payne, of Lynchburg; S. P. Moore (late Surgeon-General C. S. A.), Richmond; S. C. Gleaves, of Wytheville. Also, Drs. S. D. Gross and Joseph Pancoast, of Philadelphia; James R. Wood and T. Gaillard Thomas, of New York City.

The subject of Hæmorrhoids was fully discussed by the Fellows present.

The subject for discussion at the next meeting is: "*The Use of Forceps in Obstetrical Practice.*"

The meetings of the Academy, which are held monthly, are full of interest.

Book Notices, &c.

A Treatise on the Diseases of the Nervous System. By WM. A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System in the Medical Department of the University of the City of New York, etc. With 109 Illustrations. Sixth Edition. Rewritten, Enlarged and Improved. New York: D. Appleton & Co., 1876. Pp. 883. (For sale by Woodhouse & Parham, Richmond.)

The first edition of this work was issued in 1871; now the sixth is published. We are also informed in the preface that a French translation is to appear in Paris about this time. The familiarity, too, of the profession generally with Dr. Hammond's views—at least the frequency with which quotations are made from his writings—his large special practice at this time, and the posts of distinction which he occupies—all these things in a measure attest his popularity and eminence.

This edition opens with a fuller description of the instruments and apparatus employed in the diagnosis and treatment of nervous diseases than the former edition. We find also a description of Dr. Lombard's thermo-electric differential calorimeter; but the descriptions of electric batteries and their mode of action have been greatly abridged.

The chapters on *Cerebral Congestion* and *Anæmia*—especially the former—have been quite thoroughly revised. The author

still thinks that with the cephalohæmometer he has been able to "demonstrate in the most conclusive manner" that the amount of blood circulating in the cerebral vessels during sleep is much less than during wakefulness. Even admitting that his demonstrations are incontrovertible, as also the experiments under chloroform by Mr. A. Durham (*Guy's Hosp. Repts.*, 1860, p. 153), or those with the ophthalmoscope by Dr. Hughlings Jackson, etc., we yet cannot help believing with Dr. S. Weir Mitchell (*Va. Med. Monthly*, Feb., 1876, p. 770) that the vasal state is not the essential cause of sleep, but "more probably is sleep a distinct condition of the brain cells—a condition which, perhaps, may never be thoroughly comprehended, and which is more likely, in itself, a cause than a consequence of contracted vessels."

The too exclusive view, hinted above, taken by Dr. Hammond, compels him to deny that *Cerebral Hæmorrhage* occurs during sleep. Hence he refers the occurrence of hæmorrhages commonly believed to occur during sleep to "a condition which supervenes upon sleep, and which, to ordinary observers, presents the usual phenomena of sleep, but which is really a very different state—* * * stupor due to venous congestion." However practical and important are the other details of this chapter, we do not think that our author has argued well the point about the non-occurrence of cerebral hæmorrhage during sleep.

After passing over the chapters on cerebral meningeal hæmorrhage, partial cerebral anæmia, including thrombosis and embolism, cerebral softening, aphasia, acute, chronic and tubercular meningitis, cerebritis, diffused and multiple cerebral sclerosis, and tumors of the brain—all of which evince a high degree of careful study—we reach the chapter on *Insanity*, occupying nearly 70 pages. He retains the definition given in his former publications on the subject in which it is stated that "mental freedom is perverted, weakened, or destroyed." And yet the author still urges, should the subject of emotional morbid impulse, (which is a recognized form of insanity,) be guilty of an offence in law, that "the plea, I could not help it," should be absolutely disregarded by juries and judges." Such an absolute recommendation as this sentence contains, manifests to our mind a heartlessness that we hope will not meet with a responsive echo from any other quarter.

The chapters of Section II, in regular order, consider *spinal* congestion, anæmia, hæmorrhage, meningitis, acute myelitis, inflammations of the anterior tract of gray matter, including spinal paralysis of infants and adults, pseudo-hypertrophic spinal paralysis, (which latter three are referred to inflammation of the

motor and trophic nerve cells,) glosso-labio-laryngeal paralysis, progressive muscular, and progressive facial atrophy.

This last affection, *progressive facial atrophy*, is for the first time described by an American author. Dr. Hammond gives in detail an account of the only case with which he has met. "It is an atrophy, pure and simple [affecting the muscles of the cheek, causing a depression as if from loss of substance beneath the skin] without the slightest tendency to degeneration." Examination of the specimen of the buccinator muscle removed by Dr. Hammond with Duchenne's trocar, showed that the transverse diameters of the fibrillæ are diminished, and their length lessened. There is also a notable diminution in the thickness of the layers of the internal connective tissue. The disease does not cause death, but there is no case of cure on record.

In the sub-section on *Tetanus*, we scarcely think sufficient prominence is given to the therapeutic value of bromide of potassium and chloral-hydrate. Dr. H. C. Wood states, (*Therap., Mat Med. and Toxicol.*, edit. 1876, p. 313,) that he has been "unable to find a recorded death from the disease after the free exhibition of the bromide"—not less than 3ss. in the day, with hypnotic doses of chloral at night. Prof. Joseph Jones, of New Orleans, in his very valuable *Medical and Surgical Memoirs*, 1876, p. 407, also shows the excellence of these remedies; and the journals are monthly filled with, in general, confirmatory reports.

We have not the space to analyse the concise articles on the several spinal scleroses in the light of recent neurological investigations by other authors. Short chapters on non-inflammatory softening, and on tumors of the spinal cord concludes Section II.

Section III takes up, first *Hydrophobia*, in which sub-section we find the notes of the post-mortem made by the author a couple of years ago, which occupied so large a space in the New York journals. In point of treatment we find nothing new. The cures that have been reported are discredited by Dr. Hammond. Offenburt's results with woorara, (see *Monthly*, April, 1876, p. 58,) suggest a further resort to this agent, which is not mentioned by Dr. Hammond.

It appears singular that no reference occurs in any of the editions of this *Treatise* to the carefully recorded observations of Echeverria regarding *Epilepsy*—especially as his monograph, published in 1870, by Messrs. Wm. Wood & Co., is the most complete American work on the subject. The views of Vulpian, who is unwilling to acknowledge that epileptic attacks always result from vasa spasm, causing cerebral anæmia, or that the attacks are due to arrest of the circulation, which especially sup-

plies the medulla, are endorsed by Dr. Hammond in the main. This negative view of the subject, which we conceive to be based on substantial grounds, does not conflict with the observations by Schroëder van der Kolk, Echeverria, Westphal, and others, who, as is well known, have demonstrated upon the autopsic table that there are "aneurysmal dilatations" of the capillaries of the medulla.

We have already let our pen run too far in view of the space at our command. This edition includes remarks on epidemic cerebro-spinal meningitis, exophthalmic goitre, and on other subjects not treated in any former edition. A new section on toxic diseases of the nervous system is added, and the work, as a whole, is presented in a vastly improved form.

To sum up an opinion, this work is a great addition to neurological science. Though too absolute in some of its recommendations, which show the author to poor advantage, there is in it so much of actual personal observation, the descriptions of disease are so perfect, and the plans of treatment recommended are generally so well founded that the work will always be exceedingly desirable. But because there is a record of so much personal experience, but little room is left to express the views of others. But whether this be a virtue or a fault, we must leave to the personal inclination of each reader to decide for himself.

The Pathology and Treatment of Childbed. By Dr. F. WINCKEL, Formerly Professor and Director of the Gynecological Clinic at Rostock. From the 2d German Edition, with many Additional Notes by the Author. Translated by JAMES R. CHADWICK, M. D., Clinical Lecturer on Diseases of Women, Harvard University. Philadelphia: Henry C. Lea, 1876. (For sale by West, Johnston & Co., Richmond.)

This "Treatise for Physicians and Students," we are told in the translator's note, "is in Germany the standard authority." The work is, therefore, entitled to a fuller consideration than our space allows.

On glancing the eye over the introductory chapter, our attention was arrested by the remarks on thermometry, to which the author pays much attention throughout. While the normal limits are stated to lie between 99° and 100.8°F., still it is found that the temperature of lying-in women does not fluctuate more than that of healthy persons in general. We also find the important statement that, as a rule, from four to five times

as many women in childbed die in lying-in establishments as in private dwellings.

In regard to the general treatment of the diseases of childbed, Dr. Winckel, after a careful survey of the literature of the subject, is led to the conclusion that venesection "is not only unnecessary, but often absolutely injurious." Great stress is, however, laid upon the value of local depletion, and more upon the benefit of ice applications. Intra-uterine injections are recommended *in diseased women*, with these precautions: 1. Use Braun's syringe. 2. The solutions should be tepid and the injections slowly made. 3. The syringe should be free from air bubbles. 4. The solutions used should not be too concentrated—thus of nitrate of silver, 0.05 to 0.125 grms. to 50 grms. of water is sufficiently concentrated. 5. A small quantity should be first tried. 6. Injections should always be made by the physician himself.

The first chapter of Section I is on Ruptures of the Perineum. While the youth of the patients, from the statistics given of primipara (ages ranging from 17 to 20 years), does not seem to be a predisposing cause, *advanced age* is undoubtedly a predisposing cause with primipara. As to "supporting the perineum" in labor, Dr. Winckel thinks that "a rational manner" of support has prevented many a rupture. Since so many good obstetricians of this country, at least, have declared against supporting the perineum—fortifying their views by analogies and by clinical observations—we would have been glad if our author had intimated what he regards as the "rational manner" of giving the desired support.

The printer reminds us that we must curtail our notice. We regret this, for we would like to present the views of our author on the more important portions of the work—including the chapters on puerperal metritis, peritonitis, puerperal phlegmon, etc. Especially did we desire to call attention to the chapters on the so-called "puerperal fever"—a term which now-a-days is applied to the phlegmonous and diphtheritic affections of the genitals. While the author acknowledges, of course, contagiousness of puerperal fever—that is, that a nurse or physician may be the means of conveying the disease from an affected to a healthy patient, still he maintains (and adduces clinical evidence to prove) that "in private practice, and remote from lying-in establishments, without infection and without miasma, the most severe forms of the septic diseases may occur sporadically in childbed." Further, he proves that a case so developed may become the centre, as it were, of an endemic or epidemic.

A chapter is appended on "the causes of sudden death in

childbed—such as embolism, entrance of air into the uterine veins during vaginal examinations, syncope, cardiac paralysis, etc.

Section II treats of “puerperal diseases of the breast;” and Section III takes up “affections of other organs that occur in connection with childbed”—such as of the urethra and bladder, of the pelvic ligaments, and neuroses of the lower extremities. Chapter IV under this Section relates to eclampsia; chapter V to puerperal mental affections; and chapter VI—the last in the book—is a short one on “Skin Diseases of Lying-in Women.”

In summing up an opinion of this *Treatise*, we do not hesitate to say that it fills a place long void; that it will be of every day service to the *practitioner*; that it is free of the impractical theories and the confusing hair-splitting distinctions without material differences which so generally make German works heavy and wearisome to the American physician. The symptomatology, etiology, prophylaxis and treatment of puerperal diseases, are the sections of each chapter that are especially full, and these are the important points, after all, about which the physician at the bedside wants information. While frequent allusions are made to the writings of some of the distinguished gynæcologists of our own country, still we find many practical recommendations that are attributed to German or to other European authors, some of which, at least, we think, could be more distinctly traced to have originated with Americans. But this objection is excusable when it is remembered that just as Southern medical literature finds but few readers in the North, so American literature has comparatively few readers in Germany.

Dr. Chadwick deserves special mention for having made so excellent an English translation, which is throughout free of the Germanisms that so many other translators leave untranslated, because they do not know how to render the foreign idioms into home phrases which can be understood by any one.

Inhalations in the Treatment of Disease: Its Therapeutics and Practice. By J. SOLIS COHEN, M. D., Lecturer on Laryngoscopy and Diseases of the Throat and Chest, in Jefferson Medical College, etc., Second Edition, Revised and Enlarged, with many new Illustrations. Philadelphia: Lindsay & Blakiston, 1876. Pp. 392. (For sale by West, Johnston & Co., Richmond.)

It is a small criticism of a work like this, of which so much may be written in commendation, that its title is tautological. The volume is “a treatise on the inhalation of gases, vapors, fumes, compressed and rarefied air, nebulized fluids and powders.”

While inhalation in therapeutics has an ancient history, it has had many "ups and downs." The subject has been time and again revived from periodic rests; but with each revival some material advance has been made, so that now it seems to have secured a permanent foothold in medical practice. The modern introduction of the anaesthetics has, perhaps, in a great measure induced the favorable consideration which the subject now receives from almost every intelligent quarter. The first edition of Dr. Cohen's work in 1867, followed in 1870 by that most valuable monograph by Dr. Andrew H. Smith, of New York, (*Oxygen Gas as a Remedy in Disease*, 1870,) have undoubtedly done more than any other publications to popularize the subject in general in this country. The more recent and remarkable results of Waldenburg, and others, with rarefied and compressed air in the treatment of intra-thoracic diseases have given a new interest, and one too, which is apt to prove permanent.

We cannot undertake an analysis of this volume, filled, as is every page, with the statement of valuable experiences and observations. It is a book which every physician should read. In every day practice he will find some cases which will require just such information as this book contains. Even the table of contents is too lengthy for our columns in this issue.

Lectures on Orthopedic Surgery and Diseases of Joints. By LEWIS A. SAYRE, M. D., Professor of Orthopedic Surgery, Fractures and Dislocations, and Clinical Surgery, in Bellevue Hospital Medical College, etc. Illustrated by 274 Wood Engravings. New York: D. Appleton & Co., 1876. Pp. x-476. (For sale by Woodhouse & Parham, Richmond.)

We are told on the title page that these *Lectures* were delivered at Bellevue Hospital Medical College during the Winter session of 1874-'5; here and there, however, we find more recently added notes—some of them even dated January, 1876, showing that the *Lectures* are fully "up to the times."

There has been a pressing need for some time for some such practical work as this. Fortunately, too, for the wishes of the American profession, the author ranks as the leading authority on the subjects of which this volume treats. He has undoubtedly done more than any other one to dissipate the errors in the practice of older surgeons regarding diseases of joints, etc.

The volume consists of 29 lectures, phonographically reported by Dr. W. M. Carpenter. The first chapter is taken up with the history of orthopedy and general considerations. The succeeding five lectures relate to deformities in general, and give a

full exposition of the general principles of treatment. Then follow five lectures on talipes. Lecture XII is taken up with odds and ends—such as corns, bunions, ingrowing toe-nails, bow legs, knock knee, etc. The succeeding twelve lectures consider diseases of joints; two of the lectures relate to the ankle joint, four to the knee joint, five to morbus coxarius, and one to diseases which simulate hip disease, which latter is a very important and instructive lecture. Lecture XXV treats of Potts' disease. The next lecture is on rotary lateral curvature of the spine. Lectures XXVII and XXVIII are on ankylosis of the several joints. Lecture XXIX considers various deformities not described in previous lectures, such as torticollis, wrist drop, etc. A special compliment (?) is paid Laird's "Bloom of Youth," in attributing to it three of the most distressing cases of lead poisoning among women that have ever come under Dr. Sayre's observation.

We have thus stated the general scope of the work, a very important feature of which is the number of wood engravings used in illustration.

Our space is too limited to allow of any special remarks. We cannot say that these lectures fairly represent the practices of American surgeons, generally in many important particulars; in fact it does not seem to have entered into the purpose of the author to have done this. He strives rather to present those practices which his own personal experience has confirmed. While this plan has its advantages, yet it causes much that is valuable in the practice of other surgeons to receive no attention. Scattered through our exchanges there are a number of important suggestions that receive no attention whatever at the hands of Dr. Sayre. This work suggests the need of a systematic treatise on Orthopedy, etc. We would be glad to have reason to hope that the author, in his next edition (which we are confident will be soon demanded by the rapid sale of the present edition), will undertake to represent as well the approved suggestions and practices of others, and thus make his work fulfil more nearly the purposes of a systematic treatise.

More than 16 pages are occupied with the case of Miss Losee, with which every body became familiar some years ago. While there is much about the history of the case to make it of interest to the author, we imagine that but few others will recognize its importance sufficiently to think it entitled to so much space. A great man suffers less by remaining quiet after the heat of battle is past, and the victory won, than by giving a permanent record to such notoriety, as all parties suffered who were interested in this case.

Fermentation. By P. SCHUTZENBERGER, Director Chemical Laboratory at the Sorbonne. 28 Illustrations. New York: D. Appleton & Co., 1876. Pp. 331. (For sale by West, Johnston & Co., Richmond.)

This is the 20th volume of the International Scientific Series, which has done so much in this country to popularize scientific study, and for which undertaking the publishers, Messrs. D. Appleton & Co., are entitled to universal thanks. No one more than the physician should more cordially endorse their laudable effort. We can look for reformation in professional attainments *only* when the educated masses come to be as familiar with biological and physical laws as the physician. The work before us is on a subject of every day importance; it is written by a prominent author; the statements and discussions are clear, forcibly expressed and instructive. The force of fermentation—for it may be spoken of as such with almost scientific exactness—plays so important a part in pathogeny, that the work is of more than general interest to the physician, who will derive from its perusal many facts of value.

The Student's Guide to the Practice of Midwifery. By D. LLOYD ROBERTS, M. D., M. R. C. P., Lond. Physician to St. Mary's Hospital, etc. Philadelphia: Lindsay & Blakiston, 1876. Pp. 317. (For sale by West, Johnston & Co., Richmond.)

This is a 12 mo. manual, "written mainly for the instruction of students," with the hope, on the part of the author, that "it may sometimes be found of service to practitioners. It contains as much information as we could expect to find in a ready reference book of its size. But it has some grave objections which must lessen our ardor in recommending it for the purposes for which it was written. For instance, the most important of all the chapters in such a work—the one on *Mechanism of Labor*—is muddy in particulars. It even puzzles one familiar with obstetric practice and literature, to see exactly what the author is driving at in some places. The thorough understanding of this subject furnishes the key, by means of which we may confidently enter any lying-in ward or chamber; hence in a work intended "mainly for the instruction of students," no effort or pains should be spared in making the subject as easily intelligible as possible. If the student thoroughly masters the subject of *mechanism of labor* by reading some other author, such as the illustrious work of the lamented Hodge, of our own country, then he may return to this handbook for instruction in other obstetric matters.

Third Annual Report of the Secretary of the State Board of Health of Michigan for the year ending September 30th, 1875.
Lansing: 1876. Pp. 170.

The energy displayed by Dr. Henry B. Baker, the well-chosen Secretary of the Michigan Board, is equalled by his marked ability to meet the important obligations resting upon him. We do not know, however, whether the present volume is the superior or the equal of former publications by the said board—the last was so valuable. We notice the omission from this publication of the State vital and mortuary statistics, which we had regarded as of great importance—not only to Michigan, but as reliable also for reference by residents of other States.

The total expenses of the Board, including the Secretary's salary of \$2,000, and \$162 for expenses of members of the Board, was only \$3,724.21. This was an economical expenditure on the part of the State. How long will it take other States to view the subject of the pecuniary expense of boards of health in the proper light?

The same cause that has forced us to abbreviate notices of other books compels us to limit our remarks now.

The second annual address of the President, Dr. H. O. Hitchcock, of Kalamazoo, is an irresistible argument urging the establishment of Local Boards of Health. The investigations by Prof. R. C. Kedzie, M. D., of Lansing, regarding the Use of Poisons in Agriculture, show that as an insect destroyer, Paris-green (aceto-arsenite of copper), when properly used on the soil, is perfectly safe and effective. Mr. McMurtrie in one instance places as the safe limit 900 lbs. to the acre; but this quantity is *vastly* in excess of any need. Dr. Arthur Hazlewood, of Grand Rapids, gives a short but valuable paper on Trichinæ, with cases. The symptoms caused by these parasites are, first, those of rheumatic fever, and afterwards of typhoid fever. Rev. Charles H. Brigham, of Ann Arbor, writes an exceedingly sensible essay on the Influence of Occupations upon Health—his conclusions being of a general character, which each man can take to himself. Dr. Hitchcock has a second paper: Disposal of Human Excreta—Dangerous Errors, and how to avoid them—a paper that, because of its practical value, should be read by every house builder, and from which every local board can derive important lessons for guidance. Dr. Baker has two short papers on Failure to Prevent Death, and on the Reproduction of Disease Germs. The State Inspector of Illuminating Oils in Michigan reports on the progress of inspection under the laws of the State since his appointment in May, 1875. A second paper by

Dr. Hazlewood is on the Water Supply in relation to Health and Disease in some of the Townships, &c., of Michigan. It is a sad mistake not to have published the whole paper at once. A year's delay before the appearance of the second part causes one to forget what he has read, and hence he loses interest in the subsequent part of the report. Dr. R. C. Kedzie's paper before the State Medical Society on *Ozone* is reprinted in this volume. The last paper is by Henry F. Lyster, M. A., M. D., of Detroit, on the Influence of Drainage in removing certain Forms of Disease, and in promoting Healthfulness of Cities, which subject is well treated.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D., Lond., Fellow of the Royal College of Physicians, Lond., Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital, etc. Second American from the third Revised and Enlarged English Edition. Illustrated by many Engravings on wood. Philadelphia: Henry C. Lea, 1876. Pp. 316, octavo. (For sale by West, Johnston & Co., Richmond).

It is not possible to give a review of such a work as this within the compass of a few pages. In fact, we cannot say that one is very much interested in reading it through and through—it is too much like a dictionary. But we can say that this book is of almost as much importance to the student of pathology as a good medical dictionary is to the medical student or physician. We know of no work in the English language that can take its place. This *Introduction*, along with Stricker's *Manual of Histology*, constitute an inseparable series. The numerous wood-cuts drawn from the author's microscopical preparations render this volume especially valuable to the microscopist. Appended to the descriptions of each of the new formations, &c., are remarks relating to their clinical character, pathological importance, etc.

The chapters in regular order treat of the "cell"; nutrition arrested and impaired; fatty, mucoid, colloid, amyloid, calcareous and pigmentary degeneration; tissue changes in pyrexia; nutrition increased; new formations, including sarcomata, fibromata, myxomata, lipomata, enchondromata, osteomata, lymphomata, papillomata, adenomata, carcinomata, myomata, neuromata, angiomata, and cysts; inflammation; acute tuberculosis; pyæmia and septicæmia; syphilis; inflammations of non-vascular and of common connective tissue;—of bone, blood-vessels, heart, lymphatic structures, mucous and serous membranes, of the liver, kidney, brain, spinal cord, and lungs; pulmonary phthisis; changes in the blood and circulation; thrombosis; embolism;

leukæmia; and lastly, a chapter on the preparation and mounting of specimens for the microscope.

Consumption in Australia. By C. E. REEVES, B. A., M. D., author of *Diseases of Australia*, etc. J. Brooks, Melbourne, 1874. Pp. 154. (From the Author).

The author of this little volume is the able editor of the Melbourne *Medical Record*. He moved from England to the colony in which he now resides in 1861. The introductory remarks at once correct the too common belief that lung diseases are unknown in Melbourne; and an object of the author seems to be to impress the English profession that to send consumptives to Melbourne under the idea that they will "earn enough to keep them and yet get well, is a mistake."

The consumption of Melbourne, instead of being tubercular, is most frequently *inflammatory*—with the stages of congestion, induration and softening, resulting in the formation of cavities. Indeed, the author has "been repeatedly struck with the tendency which tubercular deposits have to disappear in this climate, if the patients are not compelled to labor and expose themselves to cold and wet." As to treatment, we are told that oils and fats are not so well borne in Melbourne as in Europe.

But we cannot undertake a fuller notice of this very interesting work, which contains much valuable information that we had derived from no other source.

We have not space to notice other publications received, viz:

Case of Presumptive True Lateral Hermaphroditism. By Paul F. Munde, M. D., Reprint from *Amer. Jour. Obstet.* Feb., 1876—a most remarkable case.

Transactions Ohio Medical Society, 1875.

Transactions Medical Society of Arkansas, 1875.

Annual Report Board of Health of Richmond, Va., 1875.

Annual Report Board of Health of Mobile, Ala., 1875. A very unfortunate omission is the failure to give the races opposite the causes of death.

Report of Board of Health of Norfolk, Va., 1875.

Editorial.

HOMŒOPATHY IN MICHIGAN UNIVERSITY.

In May, 1875, the Regents of the Michigan University established, in compliance with legislation, two homœopathic professorships—one of practice, the other of therapeutics. Students in the homœopathic department have to study anatomy, physi-

ology, surgery, obstetrics and chemistry as taught by the five professors of these respective branches, each of whom is of the regular school of practice. The other two chairs of the regular profession (practice and therapeutics) are of course filled by representatives of the old school; but these two professors never have an opportunity of meeting the entire class, since the hours for lectures in practice and therapeutics in the homœopathic and regular schools respectively are at the same hours of the day, and the professors to occupy different rooms. Diplomas are given no longer by the medical faculty as such, but are to be signed "only by the president and secretary of the Regents on receipt of certificates from the respective professors that the applicants are proficient."

The professors representing the regular profession, it seems, opposed the legislative bill, but accepted the issue when the measure was forced upon them. For this act, instead of receiving the bitter denunciations which some have heaped upon them, they are entitled rather to the united thanks of the profession. We confess that, as for ourselves, it would have been easier to have resigned any connection with the institution, as Dr. Sager did, than to have remained as a professor in it. It requires more true moral courage to remain on board of an injured ship at sea than to betake ourselves to the life-boat—however much assistance it is possible we may render in ultimately saving boat and cargo, by remaining on board with a brave heart and a willing hand. At that moment in battle when charges have been defeated, the lines broken, hearts dispirited, it is a terrible trial of one's courage to be placed in the "forlorn hope."

On the acceptance of Dr. Sager's resignation as a member of the faculty (he was the dean), another was elected in his place. A session under the new *regime* has recently closed, which, it is stated, was quite successful, so far as the regular school was concerned,—there were several graduates; but as the homœopathic students were "first course students," none of them graduated.

At the late meeting of the Michigan State Medical Society at Ann Arbor (May 10-12), the question concerning the admission to membership of graduates of the University, class of 1876, was referred to a committee, who reported favorably upon the applicants of this year; but the committee went further. A series of resolutions was introduced by the committee on the general subject, as if all the questions relating thereto had been referred to it. These resolutions, which were adopted, after an animated debate, by a large majority, declared that the Society is not content with the existing situation; that the State "can-

not successfully teach either medicine or theology"; and recommended that the Constitution of the Society be amended in reference to the admission of members, so as to provide that no person shall be admitted "who practises or professes to practise in accordance with any so called 'party' or sectarian school of medicine, or who has recently graduated from a medical school whose professors teach, or assist in teaching, those who propose to graduate in, or practise irregular medicine."

Fortunately for the good of the Society and the profession, this last important resolution lies over, under the rules, until the next annual session before it can be engrafted as a part of the Constitution—*fortunately*, we say, for a few calm moments of reflection must force a reconsideration of the too hasty action of the majority.

Our space does not allow us to discuss any of the questions involved. Simply as to the wording of the resolution, we may remark that it allows the *professors* of the Michigan University (regular school) to remain members of the Society, to enjoy its privileges and to reap its emoluments, while it prevents the pupils from becoming members—however proficient in medicine they may be found, or however willing they may be to comply with the customs of the regular profession. In this respect, then, the provision is unfair in action.

At another time, we propose to show that the action of the Society; should it adopt the provision in its present form, would be short-sighted in policy, illiberal in effect, unjust in principle, injurious to scientific study; and that the enthusiasm of the majority, unless checked, will lead to harmful professional results.

The Ohio Medical and Surgical Journal is also the name of a 96-quarto page, bi-monthly, to be published in Columbus—\$2 a year—Dr. J. H. Pooley, editor. We are sorry to see from the prospectus that there is any conflict of interest between this enterprise and the one bearing the same name commended in our April issue. From the statement in the prospectus now before us, it seems that Dr. Pooley's journal is really entitled to the title given. The announcement does not state when to expect the first number.

Mortuary Report

OF SOUTHERN CITIES FOR MARCH AND APRIL, 1876.

ABBREVIATIONS.—*A.* for acute; *c.* for colored; *chr.* for chronic; *est.* for estimated; *f.* for female; *H. O.* for Health

Officer or Registrar; *m.* for male; *ppn.* for population; *w.* for white; *yr.* for year or years.

Richmond, Va., H. O., Dr. J. G. Cabell. Ppn. est., 35,000 w., 30,000 c. Deaths, 46 w. m., 48 w. f.; 53 c. m., 59 c. f.; also stillborn, 8 w., 25 c. Ages: Under 1 yr., 22 w., 23 c.; under 3 yr., 3 w., 8 c.; under 10, 5 w., 13 c.; under 20, 4 w., 10 c.; under 30, 10 w., 7 c.; under 40, 9 w., 11 c.; under 50, 8 w., 12 c.; under 60, 10 w., 9 c.; under 70, 10 w., 8 c.; under 80, 10 w., 12 c.; under 90, 1 w., 5 c. Causes of death: Abscess of bowels, 1 w.; accidents, 3 w., 6 c.; aneurism, 1 c.; apoplexy, 1 w., 5 c.; ascites, 1 c.; asthma, 1 w., 1 c.; atrophy, 2 w., 3 c.; birth, premature, 2 w.; bladder tumor, 1 w.; brain inflammation, 1 w.; brain softening, 2 w.; Bright's disease, 2; bronchitis, 2 w., 1 c.; cancer, 3 w., 1 c.; consumption, 18 w., 22 c.; convulsions, 2 w., 3 c.; croup, pseudo-membranous, 2 w.; debility, 3 w.; diphtheria, 1 w., 1 c.; dropsy, 1 c.; endocarditis, 1 w.; fever, typhoid, 1 w.; gangrene, senile, 1 c.; gastritis 2 w.; hæmoptysis, 2 c.; heart disease, 7 w., 10 c.; hydrocephalus, 1 w.; hydrothorax, 1 w.; infanticide, 1 w., 2 c.; insanity, 1 w., 1 c.; intussusception, 1 w.; leucocythæmia, 1 w.; lungs, congestion, 3 w., 1 c.; meningitis, 4 w., 2 c.; —, cerebro-spinal, 1 w.; old age, 3 w., 8 c.; paralysis, general, 3 w., 4 c.; peritonitis, 1 w., 1 c.; pneumonia, 2 w., 5 c.; pyæmia, 1 w.; rheumatism, 1 c.; scrofula, 4 c.; small-pox, 1 w.; trismus nascentium, 2 w., 1 c.; ulcer of stomach, 1 w.; unknown or ill-defined, 6 w., 21 c.; whooping cough, 2 w.

NORFOLK, VA.—H. O., Dr. Joseph B. Whitehead. Ppn. est., 13,500 w., 9,500 c. Deaths: 16 w. m., 13 w. f.; 12 c. m., 23 c. f.; also stillborn, 4, color not given. Ages: Under 1 yr., 2 w., 7 c.; under 3 yr., 2 w., 3 c.; under 10, 3 w., 1 c.; under 20, 1 w., 3 c.; under 30, 2 w., 10 c.; under 40, 6 w., 3 c.; under 50, 5 w., 2 c.; under 60, 3 w., 1 c.; under 70, 3 w., 1 c.; under 80, 1 w., 2 c.; under 90, 1 w., 2 c. Causes of Death: Accidents, 2 c.; Bright's disease, 1 w.; birth, premature, 1 c.; cancer, 1 c.; consumption, 6 w., 9 c.; convulsions, 1 w., 2 c.; debility, 1 w.; diphtheria, 3 w.; dropsy, 1 c.; dysentery, 1 w.; fever, malarial, 2 w.; gastritis, 1 c.; hæmoptesis, 1 c.; heart disease, 1 c.; hemiplegia, 1 w.; hydrocephalus, 1 w.; meningitis, 1 w.; — cerebro-spinal, 1 c.; old age, 1 w.; paralysis, 1 c.; pleurisy, 1 w.; pneumonia, 2 w., 4 c.; puerperal endometritis, 1 c.; — mania, 1 c.; teething, 1 c.; trismus nascentium, 1 w., 1 c.; unknown or ill-defined, 4 w., 2 c.; uræmia, 1 w.; worms, 1 c.

PETERSBURG, VA.—H. O., Dr. J. Herbert Claiborne. Ppn., 1873, census, 8,744 w., 10,185 c. Deaths, 16 w. m., 19 w. f.; 24 c. m., 28 c. f.; also stillborn, 2 c. Ages: (Color not given) Under 1 yr., 14; under 3, 4; under 10, 10; under 20, 7;

under 30, 4; under 40, 6; under 50, 10; under 60, 5; under 70, 12; under 80, 8; under 100, 3; 1 aged 110. *Causes of Death*: Accidents, 3 w., 2 c.; apoplexy, 1 w., 1 c.; atrophy, 1 c.; brain congestion, 2 c.; cancer, 1 w., 1 c.; child-birth, 1 w., congestive chill, 1 w., 4 c.; consumption, 4 w., 12 c.; convulsions, 2 c.; debility, 1 c.; diarrhœa, 2 w.; dropsy, 1 c.; fever, intermittent, 1 w.; — remittent, 1 w.; heart disease, 1 c.; lung congestion, 1 w.; meningitis, 1 w.; — cerebro-spinal, 1 c.; old age, 5 c.; paralysis, general, 2 w.; pleurisy, 1 w.; pneumonia, 2 w., 8 c.; rheumatism, 1 w.; scrofula, 1 w., 3 c.; tetanus, 1 w.; trismus nascentium, 1 w.; unknown, 4 w., 8 c.

LYNCHBURG, VA.—*H. O.*, Dr. Wm. H. Dulaney. *Ppn. est.*, 7,000 w., 7,000 c. *Deaths*, 7 w. m., 10 w. f.; 26 c. m., 26 c. f.; also *stillborn*, 4 w., 6 c. *Ages*: Under 1 yr., 1 w., 9 c.; under 3 1 w., 14 c.; under 10, 1 w.; under 20, 1 w., 10 c.; under 30, 1 w., 3 c.; under 40, 1 w., 3 c.; under 50, 2 w., 3 c.; under 60, 1 w., 2 c.; under 70, 2 w., 1 c.; under 80, 3 w., 4 c.; under 90, 1 w.; under 100, 1 w., 1 c. *Causes of Death*: Abscess, 1 c.; apoplexy, 1 w., 1 c.; dropsy, 5 c.; brain disease, 2 w.; bronchitis, 2 c.; cancer, 1 w.; consumption, 4 w., 10 c.; convulsions, 3 c.; cystitis, 1 w.; enteritis, 1 c.; fever, intermittent, 1 c.; heart disease, 2 c.; liver disease, 1 w.; old age, 2 w., 1 c.; paralysis, 1 c.; pneumonia, 1 w., 3 c.; teething, 4 c.; unknown, 1 w., 16 c.; whooping cough, 1 w., 3 c.

MOBILE, ALA.—*H. O.*, Dr. T. S. Scales. *Ppn. est.*, 40,000. *Deaths*: 40 w. m., 23 w. f.; 45 c. m., 42 c. f. *Ages* (color not given): Under 1 yr., 32; under 3 yrs., 10; under 10, 11; under 20, 9; under 30, 18; under 40, 23; under 50, 16; under 60, 10; under 70, 14; under 80, 6; under 90, 1. *Causes of Death* (color not given): Accident, 5; anæmia, 3; apoplexy, 2; birth, premature, 6; brain, congestion, 4; brain disease, 1; Bright's disease, 4; bronchitis, 7; cancer, 2; caries of spine, 1; chorea, 1; coma, 1; consumption, 25; convulsions, 3; cystitis, 1; debility, 1; dentition, 1; diarrhœa, 1; dropsy, 1; dysentery, 1; fever, congestive, 1; — hæmorrhagic malarial, 1; — remittent, 1; — typhoid, 3; — typho-malarial, 1; hæmatemesis, 1; hæmoptysis, 1; heart disease, 5; hemiplegia, 1; hydrocephalus, 1; inanition, 1; liver, abscess, 1; lung, abscess, 1; lung, congestion, 3; lung, gangrene, 1; meningitis, 1; meningitis, cerebro-spinal, 1; nephritis, 1; old age, 6; paralysis, general, 3; pertussis, 3; pneumonia, 29; pneumonia, typhoid, 2; purpura, 1; rheumatism, 2; scrofula, 1; tabes mesenterica, 1; trismus nascentium, 2; unknown, 5; uræmia, 1; worms, 1.

SELMA, ALA.—*H. O.*, Dr. W. P. Reese. *Ppn. est.*, 3,500 w., 4,000 c. *Deaths*: 3 w. m., 2 w. f.; 9 c. m., 4 c. f.; also *still-*

born, 2 w., 2 c. *Ages:* Under 1 yr., 2 c.; under 10, 1 c.; under 30, 1 w., 4 c.; under 40, 1 c.; under 50, 1 w., 2 c.; under 60, 1 c.; under 70, 1 c.; under 80, 3 c. *Causes of Deaths:* Accidents, 1 c.; ascites, 1 w., 1 c.; birth, premature, 3 c.; brain disease, 1 w.; Bright's disease, 1 c.; cancer, 1 w.; consumption, 1 w., 3 c.; heart disease, 1 c.; pneumonia, 5 c. Prevailing diseases in March were influenza, croup, and catarrh; also a case of roseola; several of dysentery; 2 cases of whooping cough. In April 12 cases of carbuncles on various parts of the body. Neuralgias and muscular rheumatism also prevalent. The leading practitioners report voluntarily to the registrar *disease statistics*—a most commendable custom.

Obituary Record.

Dr. Curtis Bell Nottingham died at his home in Macon, Ga., March 14, 1876, age 57 years. He was born in Northampton Co., Va. He graduated in medicine at the Jefferson Medical College in 1840. He enjoyed for the nine succeeding years a remarkably successful practice at Perry, Ga. Then he moved to Macon, Ga., where he grew in professional reputation and in the affections of all who met with him. Because of ill health, early in 1860, he moved to Northwestern Louisiana, where he became a planter. At the commencement of the late war he was commissioned Surgeon in the Confederate army, and served principally in medical charge of an important post in Louisiana. In 1866 he returned to Macon, Ga., where he resumed practice of medicine. He rose rapidly to the highest rank as a gynæcologist—especially because of his successful ovariectomy operations. He was also the originator of the Georgia State Board of Health, as a member of which he rendered valuable services. His recent paper on Blood-letting, read before the last meeting of the State Medical Association, at Savannah, is spoken of as “a monument of the greatness of his perception, and the accuracy of his reasoning.” The profession and the community will long feel his loss.

Dr. Charles R. McAlpine, of Portsmouth, Va., died on February 14th, 1876, of inflammation of bowels and stomach, after a short illness of five days. A. L. B.

Dr. Frank Hawthorn, late Professor of Diseases of Women and Children in the University of Louisiana, New Orleans, died of Bright's disease, Feb. 24, 1876, age 40 years.

Dr. Charles F. Rodenstein, Trenton, N. Y., died March 10th 1876.—*Med. Record.*

VIRGINIA MEDICAL MONTHLY.

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Original Communications.

ART. I.—*Injecting the Male Bladder without the Aid of a Catheter, and Some of its Advantages.* By HUNTER MCGUIRE, M. D., Professor of Surgery Medical College of Virginia, President Association of Medical Officers of Confederate States Army and Navy, etc., Richmond, Va.

About the time that Dr. Zeissl,* of Vienna, published his method of introducing fluids into the male bladder by means of an irrigator, I had under my care a case of vascular tumor of the bladder, in which the introduction of the catheter gave rise to severe chills and troublesome bleeding. This patient had local lancinating pains about the region of the bladder, hæmaturia, very frequent and painful micturition, and all the other indications of obstructive disease of the urinary passages. The use of the soft gum catheter, either to relieve the occasional retention of urine, or for the purpose of injecting the bladder, was always followed by chills and urethral fever, and sometimes by a profuse and sudden loss of blood, which blanched and exhausted the patient.

Instead of using Zeissl's method, described by Dr. Rose, of New York,† I resorted to the following simple means, which succeeded admirably: I took the common rubber bag syringe, holding about six ounces, provided with a stop-cock and a gutta percha nozzle tapering to a fine point. The syringe is one ordi-

*Wiener Med. Wochenschrift, 1874, Nos. 51 and 52.

†New York Medical Record, May, 1875, p. 330.

narily used to inject the bladder through a catheter, and the nozzle tapers to a point, so that it may fit any catheter. This bag is filled with warm water, care being taken to exclude all of the air, and the nozzle oiled and introduced into the urethra for an inch or an inch and a half. With the forefinger and thumb of the left hand, the urethra is gently compressed around the nozzle of the syringe, the stop-cock turned on so that the water may flow from the syringe into the urethra, while moderate and continued pressure is applied to the bag, and the fluid forced along the urethra into the cavity of the bladder. Care should be taken not to press the urethra too forcibly against the gutta percha nozzle of the syringe; gentle pressure only is necessary to prevent regurgitation of the fluid, and any rough manipulation will bruise the delicate mucous membrane of the urethra. The pressure applied to the bag should be gradual and continued, the surgeon making up his mind, the first time he injects the bladder in this way, to spend a few minutes in the operation; but after both he and the patient have practised it a few times it can be safely done more rapidly. The patient to whose case I have referred was in the habit of washing out his bladder twice a day by the plan described; and he did it for himself, after a little instruction, so skilfully that he could empty the syringe of water through the urethra into the bladder as rapidly as he could have done through an ordinary catheter. In making the injection, it is better to keep the penis parallel with the anterior abdominal wall, or pulled gently straight out from the pubis and perpendicular to that bone, so as, in the first instance, to give the urethra a single gentle curve; or, in the second case, to make it an almost straight tube. Care should be taken not to stretch the penis too much while the injection is being made; if stretched and pulled too much, the elastic urethral tube will be closed.

All of the fluid in front of the sphincter of the bladder is ejected with some little force by the urethra as soon as the nozzle of the syringe is taken away and the forefinger and thumb removed from the urethra; and it is better to make some provision to catch this fluid and keep it from the patient's clothes. The quantity varies from one or two drachms to half an ounce or more, according to the size of the urethra, which, measured in

this way, I have found to differ much, not only according to the age of the patient, but also in different adult individuals. Sometimes when the injection has been completed, just before withdrawing the nozzle and while it is being taken away, I remove the pressure which has been kept up upon the bag, and the syringe will suck up most of the water left in the urethra. The injection can be made while the patient is in almost any position. I have used it while the man was standing up, or sitting, or lying down, and when he was tied and in the position to be cut for stone. The recumbent position is, however, the best. The fluid used should be warm; if cold, it is difficult to inject, and painful.

Unless there is some more serious objection than I have yet been able to discover to the use of injections of the bladder, performed in the way just described, I am sure this will prove a valuable addition to our present means of treating vesical disorders.

In the case mentioned of malignant vascular tumor of the bladder, where the soft gum catheter gave rise to serious bleeding and to severe urethral fever, nothing gave the patient so much comfort as the use of this gum bag syringe. He not only employed it morning and night to wash out the blood, mucus and pus which collected there, but sometimes an injection of simple warm water stopped the pain and vesical tenesmus better than anything else.

Several times the bleeding was stopped by adding alum to the warm water, and occasionally borax and glycerine, or carbolic acid, was used. The mucous membrane of the urethra is much less sensitive to the influence of these and similar agents than the mucous membrane of the bladder, and no fear of injury to the urethra need deter the surgeon from injecting the bladder in this way. Two grains of sulphate of zinc to the ounce of rose water is a mild injection for the urethra, but that strength of this drug would not be borne with impunity by the bladder.

The next case in which I employed this means of injecting the bladder was that of lithotripsy, where we all recognize the importance of reducing manipulative interference with the bladder to the lowest possible extent. I have never been satisfied with simply directing the patient to hold his water for so many hours before the time appointed for the operation. It may not only be

painful and inconvenient for him to do this, but the amount of fluid retained in the bladder in this way is a very uncertain one. Heretofore, I have always directed the patient to empty his bladder, and just before I made the attempt to catch and crush the stone, I have introduced a catheter and injected a certain quantity of warm water. I have felt also in these cases, where success depends so much upon attention to minute details, that if the slightest laceration or abrasion of the mucous surface resulted from contact with the instrument, or from a fragment of the stone, that it was better for the breach of surface, no matter how slight, to be bathed with the pure warm water I had injected than with the man's urine—at least until time had been allowed for a thin layer of lymph to form over the abraded surface.

I have, also, always injected the bladder before cutting for stone, partly because I wanted to know certainly how much water the bladder contained, and because I preferred the first gush of fluid which came over the raw surface of the wound to be pure water and not urine; and as there is frequently a temporary suppression of the secretion of urine after lithotomy, the wound is often well glazed with lymph before the urine begins to pass through it. In the cases of stone I have recently operated on, both in lithotripsy and lithotomy, I have been able, with the bag syringe, to avoid the use of the catheter altogether. With the patient under chloroform, the injection is very rapidly accomplished.

In a case of severe cystitis, following the first of a course of lithotripsy sittings, when the patient was passing with great frequency urine loaded with muco-pus and blood, and where I did not choose to follow the urgent advice of Sir Henry Thompson, of introducing the instrument again and at once crushing the fragments, I resorted to this plan of distending the bladder with water, by means of the bag syringe, with such great and immediate relief that I was able, in a day or two, safely to employ the lithotrite again. Before the injection, the man's bladder was so irritable that it could not contain without pain more than half an ounce of urine, and the constant tenesmus of the organ had impacted the fragments against the neck of the bladder. When, with the aid, in this case, of chloroform, the bladder was distended with water, these fragments could change their position and the inflamed portion of the bladder be relieved of their presence.

A gentleman came into my office a few evenings ago, suffering from what may be called, for the sake of brevity, *strangury*. As soon as a few drops of urine collected in his bladder he had the most urgent desire to pass it, which he did with a spasmodic and convulsive effort. The pain was burning and aching, and extended from his bladder and penis to his pelvis and thighs. The man could not sit still long enough to give me a connected history of his trouble. He jumped up every moment or two, and ran out to pass a few drops of scalding urine. Desiring to get a full history of his trouble, and provoked with him for being so intolerant of pain, I said to him that his frequent efforts to urinate added to the tenesmus, and if he would control the desire for a few moments and let some water accumulate in his bladder, he would suffer less; when it occurred to me that I could more quickly effect distension of his bladder by injecting it than by waiting for the slow accumulation from his kidneys. This I accomplished after a little trouble, some using on this occasion the elastic bag attached to Politzer's air-douche for the purpose. The relief was almost complete and very quickly produced. I afterwards put him upon mucilaginous drinks and other remedies.

It is, however, in cases of cystitis and enlarged prostate that I anticipate so much benefit from the use of this method of injecting the bladder. In many of these cases it will supersede the necessity for the use of the catheter altogether. To introduce a catheter into a man's bladder and let it remain a few seconds is a simple operation, and, when properly performed, causes very trifling pain; but to permit it to remain for some minutes, is to produce a good deal of pain and irritation, as any one may tell by trying in his own person. This is the case in a healthy bladder; but the pain and irritation is still greater when the experiment is tried in an inflamed bladder. To wash out a bladder by injecting it through the catheter requires that the instrument should remain for some moments in the urethra and bladder, and very often the urethral fever and increased irritability of the bladder produced by the catheter overbalances the good the injection may have otherwise accomplished. Of course, when there is retention of urine and distension of the bladder in prostatic hypertrophy, it is our duty to empty the organ, if possible, with

the catheter; or when the residual urine is large in quantity and there is atony of the organ from long overstretching of its walls, our wisest course is gradually to empty the bladder with the soft gum catheter, in order to get rid of the alkaline urine and enable the walls of the bladder to contract again; but, even in these cases, I have occasionally been sadly disappointed. In some old and feeble individuals, with exceedingly irritable bladders, I have seen the cystitis increased, the mucus and pus augmented, and bloody urine follow the introduction of the instrument, and along with these local symptoms, irritative fever and dangerous constitutional trouble set in, which made me hesitate about resorting to the catheter again. Sometimes cases of this kind have fallen into my hands, and the experience of other surgeons is doubtless the same, where the indications for the use of the catheter have been as strong, and where I have employed as much gentleness, and, if I may so speak, as much skill, as I had done in more fortunate cases. It has seemed to me, too, that this increase of local and constitutional trouble after the use of the catheter was most apt to follow in cases where the residual urine was small in quantity, as if the constant presence of a large quantity of urine in the bladder had made it more tolerant of instrumental interference. It is in these cases of cystitis from prostatic enlargement, where only a few drachms of residual urine is left, that I have so far found the gum bag syringe of inestimable value. These cases are found to be by far the most common in the hands of careful observers. Chronic hypertrophy of the prostate is gradually produced. Months, and frequently years, elapse after the process of enlargement has begun before surgical interference is absolutely demanded. The bladder has probably been irritable, and the urine phosphatic and filled with mucus and pus. The patient has probably been drenched with alkaline diuretics and mineral waters; has tried one remedy after another, and generally one doctor after another, until at last retention of urine is complete, and resort to the catheter required. I confess that I never see a case of prostatic enlargement with the mistaken "incontinence" of urine, where the residual, foul-smelling urine is large and the man's suffering great, that I do not feel that some one is to blame for not dis-

covering the cause of the trouble sooner, and trying some means to prevent it. Our resources for this disease, it is true, are inadequate, but those that we have should be employed. I feel the same way when I find a large stone in a man's bladder, that some one should have found the stone when it was first formed and small, and the patient should not have been permitted to wait until either the operation of lithotomy was demanded, or many "sittings" of lithotripsy required for its removal. At first, one, or, at most, two applications of the lithotrite would have surely and safely removed it. Afterwards, when the stone became large, besides the danger of renal complication its presence may have provoked, the hazard to life by lithotripsy is greatly increased, or the formidable operation of cutting resorted to. Neither a large prostate or a large stone are of sudden origin, and I believe early and skillful treatment is as much demanded for one as the other.

It would be out of place in a short and hurriedly written paper like this to give, in the briefest way the opinions of different writers as to the causes of hypertrophy of the prostate. All agree that the causes are obscure, but many of them—as Civiale, Amussat, Mercier, Gross, and others—believe that it may be induced by excessive sexual intercourse, vesical calculus, organic stricture, alcoholic drinks, sedentary habits, the frequent use of bougies or catheters, or any cause which produces vascular determination to that organ. Sir Henry Thompson attributes the origin of hypertrophy to "*a necessity of structure*," and has "no doubt all circumstances which tend to induce active determination of blood to the locality may aid in its development." He thinks that much may be done to retard the progress of hypertrophy by judicious treatment, and that everything should be advised which will diminish the local supply of blood going to the organ. And yet our most important agent for treating the consequences of hypertrophy is the frequent use of the catheter to remove the residual urine. The patient is taught to use the catheter at least two or three times a day, or it may be and is not an uncommon thing for him to employ it eight or ten times in the twenty-four hours.

Many of our best writers believe the frequent introduction of the catheter one of the causes of hypertrophy. I believe this

opinion is an erroneous one, and that, as Sir Henry Thompson states, the *initial* step of the causation of hypertrophy is independent of anything of the kind, but that, as, without exception, all will agree, the repeated use of the catheter and similar causes tend to increase the already existing trouble.

In cases of hypertrophy of this organ, with few exceptions, I think we can do without the catheter by substituting for it the use of the syringe I have spoken of. Instead of teaching the patient how to introduce the catheter, to teach him the much simpler operation of injecting his bladder. If, after every effort to expel the contents of that viscus, he has several drachms or several ounces of irritating urine left in his bladder, show him how to inject his bladder with four or five ounces of warm water, simple or medicated as may be preferred. After retaining the water for a few moments, let him voluntarily expel it, or as much of the contents of his bladder as he can, and the residual fluid then left in his bladder is not the phosphatic and offensive urine, but a small portion of that fluid diluted more or less with the water injected. If advisable, this process can be repeated until the fluid left behind in the bladder, which the patient is unable to expel, is almost entirely the water you have injected.

The cases of prostatic disease in which I have used this remedy have been too few, and the time too short, to speak with any degree of certainty about its value; but the relief given in some of these cases has been so great, and the improvement so rapid that I am induced at once to suggest it to the profession. I think we can by this means, with other well-directed treatment, prevent further enlargement of the prostate or, at least, make the increase very slow.

One of the cases is that of an old and well-known practitioner of medicine and surgery in this State—a close and very skillful observer*himself. I make the following extracts from notes which he furnished me of his case:

***About that time I began to experience the necessity of getting up once in the night to evacuate the bladder, and gradually there came on also an increased frequency of desire to urinate during the day, which progressively increased until there was only an interval of about two hours; and the calls were so sudden that I was afraid to go about without wearing a gum-elastic urinal. About the last of April, Dr. McGuire injected the bladder from

the urethra, which produced much pain. This was attributed to the water being at too low a temperature. The treatment was suspended for a few days, but was resumed by using every day an injection found in the books of Van Buren & Keyes, viz.:

R. Sodæ borat..... $\bar{3}j$
 Aquæ { \bar{aa} $\bar{3}ij$
 Glycerine..... {

M. Tablespoonful to be added to $\bar{3}iv$ of water, which was used at a temperature of 98° to 100° F.

During the use of these injections, I experienced but little pain, and I have found myself more comfortable after each injection, the intervals between the calls increasing so that to-day I passed six hours without the necessity of passing urine. The urine, prior to this treatment, was neutral or alkaline, but since is uniformly acid, retaining its acid reaction for twenty-four hours after being passed. The quantity of mucus has notably decreased.

I will add, that this gentleman is seventy years of age, and he was able after each injection at once to attend to his practice. The neck of his bladder was unusually sensitive, and the use of the catheter exceedingly painful. The last time he introduced the catheter it was followed by a chill and fever, which confined him to his couch during the greater part of the day.

ART. II.—*Quinine in Parturition.* By E. T. EASLEY, A. M., M. D., Little Rock, Ark.

It may be said in a general way, that women, from their greater delicacy of constitution, are more easily, and often more favorably effected by medicines than men; yet, from their greater susceptibility, it follows that the agent should be used more carefully. Especially is this true when the antiperiodic effect of tonics is to be obtained. In obtaining this effect, great caution is necessary, lest the impression be too violent. Women *eniente* in particular, are said to suffer in this way.

It was an observation of the great Dr. Dewees that bark did not act kindly on pregnant women, and the idea has since found occasional expression from the profession, as well as empirically. The difference of opinion which exists in this relation is well known, and it is not a little surprising that our views should be

so unsettled on a subject so interesting. We are now and then informed by gentlemen of creditable attainments that they have frequently witnessed the oxytocic power of quinine; and, following fast on these confessions of faith, we are told by accurate observers that, although they have administered the drug for years without reference to the puerperal state, they have no such experience to record. There are many who go to an extreme, and do not hesitate to declare that we have no real parturient—that is, a remedy capable of inducing primary uterine contractions *per se*. A theory of this sort manifestly undertakes to show too much, as there are at least two agents (ergot and gossypium) that must be excepted from a conclusion so sweeping.

It is high time that the profession should dispense with what is erroneous, and begin to entertain definite notions of the action and value of quinine when exhibited in gestation and labor; and in a practical inquiry of the kind, it is always well to remember that there are a “great many more false *facts* than theories prevalent”—that no doctrine of the action of a drug (in either a physiological or pathological condition) can be asserted on the basis of a few cases, and that observed phenomena are neither always correctly interpreted nor honestly reported. It will be seen as we proceed that a very high estimate is placed upon the value of the agent during gestation, as well as during and subsequent to its completion, and yet the opinion is very decided that it is incompetent to originate expulsive uterine contractions.

It has been alleged (1) that the action of quinine is especially upon the grand sympathetic nervous system; and (2) that this action causes contraction of the unstriped muscular fibres supplied by the sympathetic, particularly (Monteverdi) those of the uterus, urinary bladder, the intestinal canal and the blood-vessels. In this way it came to be classed with those other remedies, such as ergot and belladonna, which have won repute in the specific treatment of inflammations. Without denying that these propositions have some truth for their foundation, it would not be difficult to explain that they have been assigned too much weight in relation to the influence exerted by the medicine on uterine contractions.

The most important contribution to the argument in favor of the parturifacient action of quinine was the lengthy memoir of Dr. Monteverdi, based upon an extended series of experiments, and published in 1871. Among other deductions, it was declared that quinine was quite capable of originating uterine contractions at full term, or of producing abortion. Unfortunately for this distinguished observer and his followers, these conclusions have not been verified by subsequent experimenters, and are at variance with all but uniform experience. The special therapeutics of quinine has been nowhere perhaps so thoroughly considered as by the physicians of the Southern and Southwestern States; nor is any fact in their experience more clearly demonstrated than that quinia is of immense value in the prophylaxis and treatment of the endemic diseases of these latitudes. Undoubtedly by far the larger number of them administer the remedy regardless of age, sex, idiosyncrasy or any other circumstance. Had it possessed the power, as alleged, of arousing uterine action *de novo*, such a host of observers would have risen up to testify to the fact as must long ago have put the question definitely at rest. Nothing is more common than that pregnant women in malarious districts are affected with agues; it is even said that the included being is so attacked.

As for the influence exerted by quinine or any other agent over the contractility of the vessels, but little can be stated as positively known; all is full of doubt, and a resort to this measure has been attended with unsatisfactory results in inflammation of the meninges. Disappointing, however, as this treatment has been, we are not prepared to deny to the drug a marked control in the contraction of muscular fibre; hence, induction of contraction in dilated blood vessels. To this property, Leibermeister attributes its antipyretic value, not only in cases of abdominal typhus or typhoid, but in the suppurative fever of variola, and in traumatic and facial erysipelas. In such cases, he prefers a continuous administration in small quantities to large doses. Recent investigations by German chemists tend to show that the remedy directly promotes the oxidation of the blood, and these experiments are important, as indicating that its influence on the tissue changes may be, to a large extent, independent of the nervous system.

Two theories (not now to be discussed) have been conspicuously presented as to *methodus medendi* of quinine in zymotic diseases. According to one of these, morbid material is eliminated from the blood or rendered inert; the other theory proposes that something that is wanting in the normal or healthy constitution of blood is supplied to that fluid. The relations of the medicine to labor and to the puerperal condition in general are those which we propose at present to consider. I am aware that personal knowledge derived from experience is necessarily the most limited and deceptive of all knowledge; and my views must be taken with allowance; but it is right to say that they are based upon an examination of the literature of the subject, as well as upon my own observation.

The fact appears to be that several agents have the power of augmenting uterine action *after it has once been originated*. The phenomena so often observed, we explain on the principle that uterine contraction or irritability being *once established*, various substances are capable of promoting or intensifying such contraction or irritability, which otherwise have no such power. That quinine does so act in uterine inertia, and in the inefficient contractions of labor, I have no doubt whatever. I have again and again had occasion to remark, under its administration, the steady improvement of the expulsive efforts when they had become very weak; and in this connection, I think, in the majority of cases it may be relied on with something like certainty.

Having gone so far, we are prepared to assent to the fifth proposition in Dr. Monteverdi's summing up. In labor it may be used with certainty and advantage to stimulate the uterine contractions, for which it is preferable to ergot for the following reasons: It does not injure mother or foetus; it acts rapidly and surely; it produces pains more nearly normal in character and intermittent than those of ergot; and it may be administered at any stage of labor, before the bag of waters is ruptured or the os dilated, or after the head is on the perineum.

Let us see how quinine stands in comparison with the remedy most commonly employed as an ecbotic and parturient. The latest and best therapeutics on the subject proves incontestibly that secale cornutum cannot always be safely administered, even in the very limited range in which its use is indicated. Dr.

Churchill says: "I have in five or six cases witnessed cerebral disturbance in different degrees, from a severe headache up to delirium, coma and insensibility follow its use." We have long been familiar with the fact, and it rests on very high authority, that the drug is apt to disorder the stomach; and, if given in large doses, to produce still graver consequences—even gangrene. By Girardin, Burns, Moreau, Churchill and others, the child is stated to be more frequently still-born after the use of ergot. Dr. Condie declares: "The incessant action of the uterus under the influence of ergot is very unlike the intermittent contractions which occur in natural labor;" and, after laying down very precise rules for its employment, he adds: "Even when thus cautiously had recourse to, the child will not unfrequently be dead-born." Dr. Keating, the American editor of an edition of Ramsbotham's *Obstetrics*, in a note to that work, remarks upon the "deleterious effects of the medicine on the foetal circulation, in reducing the number of the heart beats, and then causing them to intermit and become irregular, and finally to kill the child." It is an observation as old as the time of the great Dr. Blundell, that ergot of rye is of very uncertain operation, sometimes apparently exciting the uterus most vehemently, while at times it scarcely acts at all. It is not necessary to stop to inquire into the cause of this difference, if, indeed, it be intelligible; it is enough that we know that it is so. Indubitably, then, we need a substitute for a remedy so dangerous and uncertain in its effects—a remedy possessing its power as a partus accelerator, and free from its liability to do harm.

Such an agent, it is suggested, is the sulphate of quinine. With an infinitely wider field of applicability; with greater security, under all circumstances, to mother and child, it claims to accomplish, after labor has begun, all that ergot does. Nor is this all; for it is (an essential consideration) probably the most effectual prophylactic agent known to the materia medica. In tedious and protracted labors from uterine inertia, whether a sufficient degree of relaxation exists or not, or whether or not the os be dilated, its use is indicated. Its effects are more easily controlled than those of ergot; the uterine contractions which it generates are more nearly normal, and seldom or never inordinate. When it is desirable to arrest the contractions so pro-

duced, this may at once be accomplished by the exhibition of the anodyne agents usually employed as antidotes to cinchonism.

But besides these points in its favor, it has other recommendations that have never been claimed for ergot. It gives to the nervous system a tonicity that frequently neither the moral nor physical system can supply without invoking its aid, and so may be of incalculable benefit in the exhaustion of protracted labors, accomplishing more than it is possible for diffusive stimulants to do. It is laid down that the shock to the nervous system of a prolonged and severe labor may sometimes prove fatal, without hæmorrhage or organic injury, and this especially where the mind has been anxious or depressed. "Difficult and protracted parturition," we are told, "is every now and then fatal from this cause, and even in cases where neither extraordinary difficulty nor protraction was experienced, a fatal prostration has sometimes supervened which has admitted of no other explanation." The urgent necessity, when the patient is so endangered, for the exhibition of a remedy which proposes to rescue from exhaustion, as well as exert a valuable prophylactic effect in the recovery, cannot be otherwise than sufficiently obvious. If it be remembered that the nervous shock is not in proportion to the length of the first stage of labor, but of the second, we cannot be mistaken in reference to the indications for the employment of our remedy.

The "weed" or ephemeral fever, to which females are liable during the early part of their "getting up," is always to be watched narrowly; for if care be not taken, the paroxysm is apt to return, and we have either a distinct intermittent fever established, or it may degenerate into a continued and very troublesome form. Especially is this likely to be the case when prostration from shock or hæmorrhage has been great. A recent and eminent writer says of the weed: "It is most frequent in aguish countries, and is excited by similar causes, and I have seen what appeared to be weed in the first instance settle down into confirmed ague." We have here a positively anæmic condition, in which, nevertheless, the febrile excitement runs high; the most prominent symptom, probably, is pain in the head—in fact, no other local pain is very distressing. This condition, it is believed, may generally be anticipated and prevented by the

free use of quinine. We should not hesitate to administer the remedy during the paroxysm; even if we grant that it has a tendency to induce undue turgescence of the vessels of the brain, the medicine is still clearly indicated. An aggravated cephalalgia is not always associated with a determination of blood to the head; on the contrary, it may and often does, as in this case, exist with, and depend upon, a deficient supply of the nutrient fluid in the cerebral vessels.

Dr. Churchill, in his chapter on sudden death in parturition, details two cases that have a singular and weighty bearing on this subject. The first case he attributes to the septic influence of scarlatina contagion prevalent and in the house, in which only a slight deviation from the healthy condition could be detected after a most careful examination of the body. "I have no doubt," he says, "that the scarlatina poison, acting on a system weakened and rendered unusually susceptible by delivery, had caused death before the ordinary symptoms of that disease had time to develop themselves." In the second of these cases, he was called in consultation by Surgeon Morgan, and recollecting the first case, made a similar diagnosis. He saw the woman on the 23d of February. She became weaker on the 24th and 25th—at noon of which day Dr. Morgan thought she was dying. No local derangement could be detected at any time, and she took freely both food, spirits and medicine. "On the evening of the 25th," continues our author, "we determined to try the full exhibition of quinine, and accordingly gave her six grains at bed-time, and three grains every three hours when awake." On the next day, there was decided improvement in every way. The treatment was continued, and the patient progressed favorably through convalescence to a good recovery. Facts such as these need no comment; they are very significant, and call urgently on the profession in behalf of the prophylaxis in the treatment of parturient women.

The pathology of puerperal fever, notwithstanding all that has been lately said of it, is still involved in much obscurity. No respecter of persons, it visits alike the hovel and the palace, independent, apparently, of the character of the labor, miasmatic or atmospheric peculiarities. At times it appears seemingly unconnected with specific contagion of any kind; and

again so closely in company with erysipelas and other infectious fevers, as to be accused of a very near relationship to them. It occurs oftener than otherwise sporadically, and Mathews Duncan has lately tried to show that it is never epidemic. It may, and unquestionably does, in by far the greater number of cases, depend on a combination of causes. Whatever be the predisposing or exciting influences, no doubt exists at present, I believe, that in puerperal fever the state of the blood is much deteriorated, and that this vitiation of the blood constitutes a most important character of the disease, and one from which it derives its extraordinary malignancy. Dr. Ferguson, an accurate and ingenious observer, expressed the following opinions: "(1) The phenomena of puerperal fever originate in a vitiation of the fluids; and (2) the causes which are capable of vitiating the fluids are particularly rife after child-birth." In further remarking on the subject, the same author makes use of Cruveilhier's famous analogy between the surface of the uterus subsequent to delivery and an amputated stump. This pathology, it is likely enough, does not embrace all the morbid processes; and yet, so far as it goes, it is undoubtedly true of every case of puerperal fever. Nor is it to be forgotten that the importance of shock as an element of disease in parturition can scarcely be overestimated.

Even during the height of the pyrexia, quinine has been given to great advantage, especially in combination, or alternating, with veratrum, aconite or gelseminum. It appears that the frequency of the pulse, although inflammatory action may run high, can in this way be more effectually reduced than by giving the arterial sedative alone. Dr. Hadden, House Physician to Bellevue Hospital, after a remark to this purport, says: "I have verified the observation in many cases treated under my charge, and have, moreover, observed that the effects are more lasting."

Of the value of quinine in the prophylaxis, and in the recovery after the violence of the attack has been broken, there cannot be two opinions. Especially should the potent alkaloid be administered when the disease is prevalent, to every parturient woman. In the present state of our knowledge, if we are not greatly in error, it promises most important results—no less,

indeed, than that the mortality from this fearful scourge may be much reduced. To procure such a result, when woman shall be, in a measure, protected from suffering and death, and when, indeed, the "voice in Ramah" shall be heard less often "were a consummation devoutly to be wished." We wish to insist, then, that the full prophylactic and curative effect of quinine should be invoked without reference to pregnancy, as a possible contra-indication in all conditions demanding it.

Very valuable testimony to its usefulness in this way has recently come to us from an Indian surgeon, who was stationed at Jubbulpore in the wet season of 1868, and who was in charge of a battery of 135 men. He states that, quartered in the same barracks, was a regiment of infantry numbering 500 men. To the artillerists he served out three grains of quinine every other morning; the infantry got none. The result was he never had more than 4 per cent. sick at one time; whilst of the regiment 300 were on the sick and convalescent list at one time, so that, temporarily, the regiment was almost destroyed. Observations of this sort ought to have great weight, and are very abundant; in fact, they are so common that no remedy is so largely used in domestic and empirical practice in aguish regions.

Finally, we venture to submit the following conclusions:

1. Quinine is not capable, in medicinal quantities, of originating uterine contractions, and may be administered at all stages of pregnancy without the fear of any such result.

2. It stimulates uterine contractions after they have been once aroused and become inefficient, for which purpose it is sometimes preferable to ergot, and may be exhibited at any stage of labor.

3. In the exhaustion following tedious labors, and in the treatment of the child-bed fevers, it is very useful.

ART. III.—*Intra-Uterine Medication.* By H. E. WOODBURY, M. D., Washington, D. C.

In the *Philadelphia Medical Times*, of April 26th, 1873, we published an account of our uterine injector. In the same journal, of May 2d, 1874, an account of our uterine applicator appeared. In the month of November, 1874, by invitation, we

read a paper before the Obstetrical Society of New York City, "*On the Local Application of Nitric Acid in Endocervicitis and Endometritis.*" An abstract of that paper was published in the *American Journal of Obstetrics*, edited by P. F. Mundé, M. D., for February, 1875. Of the eight pages published in that journal, Dr. A. Lebland, of Paris, translated and published in the *Annales de Gynécologie*, of April, 1875, about four pages. Dr. A. Martin Lauzer, in his *Revue de Therapeutique Medico-Chirurgicale*, of May, 1875, published an editorial of about two columns, in which he quotes from Dr. Lebland's translation. In the *Annales de Gynécologie*, of November, 1875, Dr. Lebland, in an editorial, refers to our method, and gives the endorsements of Dr. Braithwaite, of Leeds, and Dr. Siredy, of Paris. The use of the nitric acid in these cases has been further endorsed by Drs. Chenery, Chadwick, Bixby, Lyman and Baker—*Boston Medical and Surgical Journal*, Dec. 9th, 1875.

It is our purpose in this communication to call the attention of the medical profession in the South to our method for treating those troublesome and persistent affections—endometritis, cervical and corporeal.

We hold that no science should be more progressive than that of medicine. To relieve promptly and successfully the ills of humanity should be the single purpose of the medical practitioner. Such being the case, every new method is worthy of a trial, and if any one be found wanting, let it be discarded. But should any new plan of treatment be possessed of real merit, we should gladly accept it as an advance made in the noblest of the professions—as a real boon to suffering humanity.

By the method we are about to set forth in this paper, we have treated, since 1870, one hundred cases of uterine disease, and every case, save one, successfully. We are, therefore, fully convinced that our method needs only to be known, in order that it may be appreciated by the profession. To all we freely offer it, trusting that in their hands it may prove as successful as it has thus far been in our own.

The remedies we use are :

Nitric acid, L. P.,

Chromic acid,

Fluid ext. pini canadensis,

Tinct. iodine,

Carbolic acid (liquefied),

Tannin and glycerin.

Nitrate of silver, caustic potash and acid nitrate of mercury we discard entirely, for the following reasons: The former is too slow in its action, and by forming a film or slough from the coagulation of the albuminous compounds on the surface, fails to act deeply enough upon the tissues. It is also apt to cause great pain. It ruins the garments if it comes in contact with them. On the whole, we consider it an unreliable remedy. The latter are too active, and cannot be used without great danger to the neighboring healthy tissue. We give to *nitric acid*, in the treatment of these cases, the first and highest place. We believe that any one who uses it in a single case will be convinced of its superior value. It acts promptly and efficiently; is not painful in the great majority of cases; is easily controlled, and by its action on the sub-mucous tissues, speedily arrests the hypersecretion that characterizes these affections. It never injures the garments, for it is completely neutralized by the secretions with which it comes in contact. We first commenced using it in these cases in 1870—not, we confess, without some misgivings; but a constant experience with it since that time, has convinced us that it is, *par excellence*, the sheet anchor of the physician in the treatment of uterine ulceration, whether this be of a cervical or corporeal type.

What induced us to try the strong acid in these cases? A fact that we believe is beginning to be admitted by the profession—one of which we had become well convinced from our own observations in practice, led us to conclude that the use of the strong nitric acid would be unattended with danger. It was this: That the uterus is not so delicate and sensitive an organ as it might, without due reflection, appear to be; but that, from the peculiarity of its functions, its physiological relations, and the nature of its muscular coat, it is tolerant of pretty rough handling at times. In proof of this position, we need only refer to a few of the operations it tolerates—such as version in certain cases, requiring the introduction of the hand into the organ; extraction of placenta, sometimes requiring the same operation; the vast amount of dilating and manipulating to which it is subjected, as in the extirpation of abnormal growths; the mutilation of the entire cervix, as recommended and practised by many of the English and some of our own gynæcologists.

gists, in so-called occlusion or contraction of the part; the introduction of solid caustic into its cavity, in endometritis; and lastly, an operation *not surgical*, but *physiological*—one from the abuse of which we believe many derangements of the uterus to result—we refer to coition, practised to an excess: These considerations convinced us that no unpleasant results would follow the application of the fuming nitric acid, if it were used carefully and prudently. Having used it in these cases for more than five years, we are fully confirmed in this opinion.

The Uterine Applicator, and how we use it.—While we claim no particular credit for having used nitric acid in these cases, we believe that the profession will appreciate the very simple and complete instrument we have devised and originated for this purpose. The uterine applicator (see fig. 1) consists of a piece of

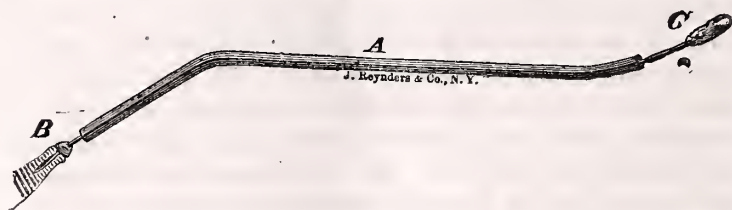


Figure 1.

glass tube—calibre of catheter No. x or xii—eight to ten inches in length; open at both ends—the edges being rounded. The terminal extremity has the curvature of the female catheter, while the tube, at about two inches from its other extremity, is bent at an angle of about 45° , in order that the hand of the operator may not obstruct the view in using it. Through this tube, as a canula, an elastic steel rod or staff is passed, to which a handle is attached. This rod or staff is about an inch and a half or two inches longer than the tube—the temper being removed from its extremity for that distance, so that it may be bent to any desired curve. Just enough of cotton is wrapped around the end of this staff to admit of its being withdrawn into the tube. This cotton is then saturated with the acid, or other solution, and withdrawn into the tube, the end of which is wiped dry. The tube is then introduced through the speculum, into the neck or cavity of the organ, as the case may require. On pushing in the staff, the acid is brought in contact with the af-

fected part. Cotton enough may be applied to the end of the staff to make it act as a piston, and a few drops of the acid, or other fluid, may be drawn into the tube. On pushing in the staff, this will be discharged—guttatim, and not with the force of an injection. Thus it will be seen that the healthy parts are amply protected against the action of the remedies used. In all cases, the neck of the womb should be patulous enough to admit the instrument without difficulty.

In some instances, dilatation of the neck is necessary. We never use the sponge-tent for this purpose, as we consider it not only uncleanly, but extremely unsafe. Septicæmia, no doubt, often results from this cause, and we prefer a tent that is not only cleanly and soothing, but, what is of far more importance, *one that is safe*. These properties we find combined in the bark of the elm (*Ulmus American.*). Tents of this material do not dilate as rapidly as some others, but in a pretty extensive use of them, we have never known them to cause irritation; and this we consider a very strong argument in their favor.

By the use of this instrument, any and all portions of the cavity of the neck and body may be reached, and we consider it far better than the intra-uterine speculum devised and recommended by Dr. L. Atthill, of Dublin. We first used, in 1870, our injector (see fig. 2) for making these applications, but for the

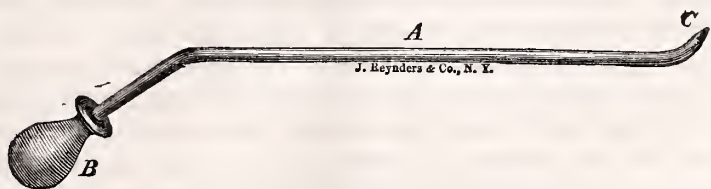


Figure 2.

last three years have made them with the applicator—an instrument we greatly prefer. Both instruments are manufactured and sold by John Reynders & Co., 309 Fourth Avenue, New York City.

Frequency of the Applications, and how we make them.—The old and standard authorities recommend that applications be made to the neck or cavity of the uterus—not oftener than once in from six to ten days. We believe, from our own practice and experience, that this is a mistake—one that accounts for the

fact that they were so long in affording relief to such cases. From such a rule we have *unhesitatingly deviated*, much to the comfort of our patients—more to the satisfaction of ourself. Let us consider briefly what we have to do in these cases, and we shall then be the better able to judge how we can best do it. As in all of these cases hypersecretion is a characteristic symptom, our first aim should be to arrest this. So long as this condition remains, improvement is impossible. Once correct this, and we have taken an important step towards affecting a cure. As, in the majority of cases, the disease has become, in a measure, chronic before the advice of the physician is sought, remedies must be resorted to that will act *promptly* and *efficiently*, and penetrate deeply enough to completely change the morbid condition of the parts. Nitric acid, L. P., does this, and therefore we use it as follows: We apply from three to five drops with the applicator, when we make our first examination. On the third day after, we apply the tincture of iodine or carbolic acid. On the sixth day, the nitric acid again, and so on, making an application every third day, but *never using the nitric acid twice in succession*.

Applications are thus made every other day during the first twelve days of treatment, alternating the acid with other remedies. As the excessive secretion is diminished, and the parts begin to assume a more healthy appearance, we lengthen the intervals between the applications to four, five, or even six days. After each application, we introduce into the vagina a cotton plug, to which a strong cord is attached. This plug is saturated with carbolic acid and olive oil or glycerine (parts 1 to 6), or with the fluid extract of hemlock (Kennedy's) and glycerine, equal parts, and is left *in situ* for twenty-four hours, when it is withdrawn by the patient and the parts cleansed by an injection of solution of sulphate of zinc, or castile soap and water. Previous to making such application, the secretions must, as far as possible, be removed from the neck of the organ. If the case be characterized by anæmia, we order the chalybeates; but the uterine tonic from which we have procured the best results (one that we order in every case), is fluid extract of hedeoma. The dose of this preparation varies from twenty drops to half a drachm. Of Tilden's, we generally order twenty drops *ter in*

die. During treatment, the patient, if married, is advised to abstain as much as possible from sexual indulgence, to avoid long walks, and never to use the sewing machine. We have often been asked if women become pregnant after this treatment? We answer, most assuredly they do, the same as after any other method of treatment. One of our patients has had three children since her treatment four years ago.

In the majority of our cases, we have to make but four or five applications of the nitric acid during the entire course of treatment; for, as soon as the hypersecretion is arrested, we substitute for this our other remedies. If its use were persisted in after this result has been attained, it might, and would, undoubtedly, give rise to a lesion quite as objectionable as the one we seek to remove.

Is it not dangerous to apply the nitric acid to the neck and cavity of the womb? This is the question that is always asked when our method is discussed. Why should it prove any more dangerous than is any other caustic? If, as is frequently done, a piece of nitrate of silver can be left in the uterine cavity, causing, as it does, great pain, why should we hesitate to introduce from three to five drops of the acid? Our theory as regards these applications is, that the acid, when slowly applied, is taken up immediately by the tissues, and therefore is just as safe (and not by any means as painful) as the nitrate of silver. The acid is speedily neutralized by the alkalinity of the secretions, and its destructive action thus, in a great degree, modified. Having used it in the manner we have described, we have occasionally known it to produce pain, which soon passed off; while we have had the pain following the introduction of a piece of caustic prove very severe, and last for hours. If we bear in mind the fact that simple water injected into the uterine cavity, as it sometimes is by accident, will cause severe suffering, we need not be surprised if, *in some few cases*, the application of four or five drops of acid may cause pain. The general expression of our patients is, that "the application causes a feeling of warmth in the part." If ordinary care be used, no unpleasant results need be feared.

Prognosis in these cases.—As regards the prognosis in these cases, we agree with Dr. Bennett in his view that nearly all

cases are curable. There may be peculiar constitutional complications that will render our prognosis difficult, or, at least, doubtful; but our own experience and observation convince us that these diseases never prove fatal, unless, as Dr. Bennett has stated, indirectly so, as when they induce such a condition of the nervous system and of the blood as will render the patient less liable to resist the attacks of disease of a more acute character, if she be exposed to such, or of chronic ones, should she suffer from the same.

When the disease is located on the mucus membrane outside the os, it can be easily cured. When it extends into the cervical canal, the case is more difficult. Byford (*On the Uterus*, p. 70) says, "in sub-mucous inflammation, the prognosis is unfavorable. It becomes especially unfavorable when the inflammation has lasted so long as to materially alter the shape, size and consistency of the neck of the uterus by deposition of lymph." We are happy to say that we take a more hopeful view of the situation. It is, no doubt, difficult to rectify deformities, and the cases to which he refers are characterized by deformity. But we do claim that the inflammation in which this organic change had its origin can be removed, to the almost entire relief of our patient. Further than this, in some of the cases which we have treated of this type, where an opportunity was afforded us for a specular examination, many months after the suspension of treatment, we found a most marked improvement in the condition of the organ. If Dr. B. means only to convey the idea that the organ never returns to its former condition, after the inflammation be removed, we might agree with him; for in a case of orchitis, the cure is almost always complete, and yet we have never seen the testicle as small as before the attack. In the majority of these cases, we may, I think, be fully justified in giving a favorable prognosis.

Is the disease liable to return after treatment?—This is an important question. If the disease be thoroughly cured, and the exciting causes that gave rise to it in the first instance be avoided, we see no more reason for it to return than for an inflammation of any other organ to do so. As a matter of course, an inflammation of the lungs, the stomach or the kidneys renders these organs somewhat more liable to a subsequent attack; and

the bilious fever you cured your patient of last fall, does not by any means exempt him from a similar attack next fall. Now, when these so-called relapses occur in cases of uterine disease, we are of opinion that the disease was only held in abeyance by the treatment, not cured. If the applications fail to cover the entire surface that is diseased, while the patient's symptoms may in some measure improve, the germs of the disease still remain, smouldering, dormant for a time, only to break out with fresh force in the future. If the applications be made thoroughly, and as long as necessary, we do not believe that subsequent attacks of the disease need be apprehended.

Results of treatment.—According to the best authorities, the time required for the successful treatment of these diseases varies from six to eighteen months. This is the period required by the old and generally received method of treatment, nitrate of silver, &c. Our experience in these cases has convinced us that they may be cured in from six to twelve weeks by our method. And why so vast a difference of time? Simply for the following reasons: In the large majority of cases characterized by hypersecretion, the disease has become deeply-seated, and applications that act on the surface alone fail to reach the parts really affected. When this condition obtains, our remedies must penetrate to such an extent as to completely change the structure of the affected parts. If we act on the surface only, we fail to produce such a result; the cause of the trouble is not removed. While, therefore, our plan of treatment may seem at first sight a heroic one, such a plan alone will meet the requirements of the case. Is it not better to control a persistent disease by the use of active remedies, than to confine ourselves to the use of those that a long experience has proved to be feeble, if not entirely inert? In our experience with the remedies we have named, the results have been all that we could have desired. We have, at times, been as much astonished at these as the most skeptical could have been. Facts are stubborn arguments, and they fully confirm us in our position.

In conclusion.—We have stated as briefly as possible our method of treating these diseases, and the results of such treatment. We have endeavored to avoid all pathological and physiological discussions in this paper. We have not desired to bring

forward for your consideration researches and investigations fraught rather with scientific curiosity than with practical value, even had we felt ourself competent to do so. While it might prove a matter of interest to know into how many nucleoli each nucleus of the epithelial cell is split, in the several changes that characterize the various gradations of uterine inflammation, we leave this and kindred topics to be elucidated by the lover of histology. It is sufficient for all practical purposes that we recognize in these cases, as a general rule, the result of some chief disturbing cause—term this, if you will, inflammation, hyperæmia, or anything else. The main question with which, as professional men, we have to do, is this: How shall we best treat these cases? This question we have endeavored to answer. The only Scylla and Charybdis we have to avoid, is *too much conservatism on the one hand—too much radicalism on the other.*

It may be said that we incline too much to the latter. If so, thus let it be, so long as our efforts are crowned with such flattering success. We consider radicalism a pretty direct road to progress. The searcher after professional light must, to a certain extent, ignore the conservatism of the past. Columbus-like, he must launch forth on the great ocean of doubt and mystery that ebbs and flows before him, resolved, despite all opposition, that he will discover that grand and unknown realm of truth which lies beyond. Our age is a progressive one, and we can ill afford to be restrained by the prejudices and conventionalities of former times. Let us not fold our hands and sit idle, for fear that some professional brother shall cry out, it is heresy—rebellion against the usages and customs of the profession. Rather let us strive to accomplish something that will reflect honor upon that profession, and cause those who succeed us to remember us kindly, as earnest and faithful workers in that grandest of all human vocations—the *Healing Art.*

The Mortality of the Globe is 42,403,000 yearly—115,200 per day, 4,800 per hour, 80 per minute. Of 10,000 persons, 1 reaches 100 years, 1 in 500 attains 80 years, 1 in 100 reaches 70 years.—*Louisville Med. News.*

ART. IV.—*Beriberi*. By GEO. HALSTED BOYLAND, M.D., M.A., etc., Baltimore, Md.

The disease known as beriberi is not peculiar to our clime. In fact, no case has as yet been recorded as occurring here; nor, judging the future by the past, are we likely soon to be called upon to treat the symptoms grouped together under that name. Nevertheless, it behooves the profession, as rational physicians and surgeons, to explore and become familiar with the darkest and most remote corners of science, and to this end to profit by the little light that has as yet shone in that direction.

Most of the medical text-books of the past and present generation pass over beriberi in silence; among many examined, one was found to contain a few lines upon the subject, but these were so vague and cursory as to leave the reader without any adequate idea of the disease in question. It is our intention, therefore, to place before you such facts as have been gleaned from a careful study of the literature bearing upon our subject—literature chiefly of authors on tropical diseases, of which, it will hardly be necessary to state, this is one.

The main characteristic of this obscure malady is extreme weakness; hence the name beriberi given to it by the Malabars, among whom it is at home. The word *beri*, in the Singhalèse language, signifies weakness. We have, then, from beriberi, *weakness weakness*—literally translated, “*extreme*” *weakness*—as the iteration of a substantive, according to the idiom, generally implies the meaning in a superlative degree.

As to its *geographical distribution*, this disease is considered endemic on the coasts of the Indian Ocean—more especially in the Gulf of Bengal—on the coast of Coromandel, Ceylon; on the islands of the Indian Archipelago, as among the crews of vessels plying those waters. Natives are attacked more frequently than strangers; but beriberi is much more fatal among the latter than the former. This disease appeared in Brazil in 1865.*

With reference to the *ætiology*, the most important factor is generally acknowledged to be the miasmatic intoxication—dampness and warmth exercising great influence. As a very favora-

*Mémoire sur le Beriberi, par Prof. Dr. I. Sodré Pereira, précédé d'une introduction de Chas. Mauriac, D. M., Méd. à l'Hôpit. du Midi. Paris, 1874.

ble condition for the outbreak of the disease, acclimatization may be regarded. It does not, as a rule, attack those who have recently arrived in districts where it prevails, and seldom appears under twelve months stay. The working of the poison is very slow, and, strange to say, the most powerful and healthy individuals, the best nourished, and those belonging to the better classes, are the ones most readily infected. Bad and insufficient food exert only a very slight, if any, influence, while anxiety, great excitement or depression predispose to it. The disease belongs almost exclusively to the male sex, between the ages of 20 and 40 years, sparing children and old men.

Symptoms.—Beriberi is a malady of the general system, characterized by a bad condition of the blood, œdematous swellings, and a feeling of extreme weakness of the muscular power, so that the limbs, especially the lower ones, often cannot be moved. At the same time, there is a sensation as of sleep, accompanied by *centripetal* formications. Later, following hyperæsthesia of the skin and muscles, motor paralysis sets in, commencing also at the periphery, and the gait resembles that of locomotor ataxy. An almost unknown, yet, according to Trinter,* a probably pathognomonic symptom is the frequent changing of place of the œdema; for instance, the lower extremities have become œdematous, at the expiration of six hours they appear quite normal, while the upper extremities are now œdematous. This has been frequently observed by Pereira. In most cases, there are serous extravasations into the cavities of the thorax and abdomen, which, in conjunction with the muscular weakness, render breathing difficult. Often a feeling of oppression in the epigastrium and on the front of the thorax precede the dyspnoea—a symptom of very unfavorable import, as it points to rapid deteriorations in the respiratory apparatus. With the dyspnoea, mucous râles, bronchophony, crepitation, also dullness in consequence of pneumonic or pleuritic exudation are observable. In one case recorded by Pereira, thoracentesis was performed, and a quart and a half of greenish fluid, charged with albumen, was discharged. The pulse is weak, frequent, often ceasing; the heart only at times palpitates, and is irregular in the rhythm of beats. In some cases, a bellows murmur is no-

*Schmidt's Jahrbücher. 1875.

ticeable in the first sound, as we see in chlorosis, or else noises are heard in place of both normal sounds, accompanied by a soft murmur in the carotids and large vessels.

With regard to *the course* of this odd malady, a prominent feature is the absence of fever; but not seldom, however, the regular setting in of the disease is heralded by a few attacks of quotidian or tertian fever—what might be expected when it is remembered that beriberi prevails principally in malarious districts. The temperature of the lower extremities is three or four degrees under normal in the rectum; also in the axilla and mouth it is a little lower than normal. The secretion of sweat is entirely suspended; that of the urine very much diminished—in one case to 64 grammes in 24 hours (about $2\frac{1}{2}$ ounces). The urine is of the ordinary color, or tinged by bile, free from sugar, but often containing albumen. Patients are impotent, and nightly emissions of semen are often present from the beginning. As the disease progresses, the tongue becomes white, trembling, coated; the mucous membrane scales off; the breath is foetid; appetite gone; generally costiveness prevails; the intelligence remains undisturbed; sleep is slightly broken by bad dreams and muscular movements. Appearances of ataxy have not been observed; the sufferers die with violent pain in the larger articulations, or of asphyxia.

There is another form of beriberi, which I will merely mention on the authority of Aitken. Although it has never been observed by some authors, yet the weight of this great man is a sufficient guarantee of accuracy in the distinction made. This is the inflammatory or acute beriberi in and for itself. Pereira acknowledges that he saw a certain difference in the severity of the disease, and thus distinguishes beriberi *bénigna* from beriberi *maligna*. He thus meets Aitken, as it were, half way, affirming at the same time that he never observed a case of inflammatory beriberi. Blood drawn from the vein of a patient is of watery appearance, in consequence of the lessening of the more solid ingredients; on account of the few red blood corpuscles, leukæmia is apparently present; the fibrin is coagulated, forming a mass.

At the autopsy, serous infiltrations are found in the body cavities, especially in the pleuræ and in the pericardium. The mus-

cular substance of the heart is often found to be infiltrated with serum—is pale and soft. The ventricles are distended; in the left one, and still oftener in the larger arteries, coagulated blood is found. The lung tissue is infiltrated with serum, as are also the ventricles of the brain and the space between the layers of the arachnoid. Congestion in the brain has never been observed. There is sometimes an increase of the cerebro-spinal fluid, and sometimes a certain degree of softening of the cord. The kidneys are nearly always bloodless. The other organs offer nothing abnormal.

A few words only remain to be said about the *pathogeny, differential diagnosis* and *treatment* of beriberi. As for *prophylaxis*, it will already have been surmised that the best and surest prophylactic measure is not to go into an infected district. As to pathogeny, beriberi is to be placed by the side of those diseases depending upon a deep intoxication of the nerve centres, especially of the spinal cord and ganglionic systems, and is, therefore, to be classed in the same category with Asiatic cholera and malarious fevers in general. In this way, the above-named symptoms may be easily explained—particularly the characteristic œdema, which the author attributes to paralysis of the vaso-motor nerves.

The *differential diagnosis* of beriberi from such diseases as bear a certain resemblance to it, namely: from malarious fevers, chronic inflammations or softening of the spinal cord, organic disease of the heart, marked anæmia, etc., is sufficiently assured by the extreme prostration of all functions, and the peculiarly tenacious and characteristic œdema, with a careful study of the anamnesis. Dr. Charles Albert, of Baltimore, has observed a type of malarious fever, preceded by the usual quotidian or tertian chill, and accompanied by œdema of the lower extremities; such cases had a medium duration, resulting in cure, and yielded to quinine; they were, at the same time, easily distinguished from the ordinary intermittent class in which the attacks and periods of rest continue throughout the disease—œdema being entirely absent. Dr. Albert's report embraces a series of cases that came under his charge during his residence in the Southern counties of this State. Ground exists, therefore, to accept a milder type of beriberi, if not peculiar to, at least appearing in America.

The duration of bereberi is generally long; death supervenes between the 7th and 30th days of the disease. Even in the cases in which, with diminution of the above-described symptoms, a cure is effected, the patients regain strength extremely slowly; the pains in the articulations remain for months. The sexual organs only very seldom receive their former power; further, those afflicted with the disease almost always lose forever their former freshness or buoyancy of body and mind, and are prone to relapse. The more severe form is always fatal, unless the physician succeeds in checking the disease at once; death ensues from asphyxia, or embolism, or from general weakness.

The *treatment* must necessarily be addressed to the symptoms, from the fact that we possess no specific against the poison. Many drugs have been tried—among others, and in the first line, quinine and iron—but without the least benefit. The only means of safety is for the patient, immediately the disease breaks out, to go to a country where it has not yet made its appearance—best of all on a sea voyage—to Europe, for instance. Pereira gives a long list of cases, in which the patients, almost moribund, sailed from Bahia, and without other medical treatment arrived almost well in Europe. It is probable that the benefit accruing from such a sea voyage rests simply upon the fact that the person is withdrawn from the pernicious working of toxical influences, and not upon any effect that salt air and water, with change of climate, might have as an antidote to the morbid process.

Beriberi, therefore, will not yield to the same treatment as intermittent fever, and the sea voyage, so efficacious in the former, is of no avail in the latter.

A case of intermittent fever came under my own observation some time since, in which the patient, who had contracted the disease on the border of the river Congo, in Africa, after a long voyage to Europe, where I saw him, was suffering with an enlarged spleen, and more aggravated symptoms generally (which had never abated in the least while at sea) than when he left Africa. This statement, made by himself, was confirmed by his *status* at the time of examination.

Mention has been made of intermittent fever in this connection as being the disease with which beriberi would most likely

be confounded; but careful attention to the symptoms and progress of the malady will not fail to elucidate that, although presenting some analogy, and being in the same group, yet each is a disease in and by itself—being totally independent of the other.

Clinical Reports.

Ergotin Hypodermically in a Case of Fibro-Cystic Ovarian Tumor—Recovery. By WM. B. GRAY, M. D., Richmond, Va.

E. W., a dark brown negress, aged 23 years, presented herself at my office June 6, 1874, to consult me on account of what she regarded a pregnancy protracted beyond the tenth month. She stated that she had been married nine years, and several years ago had suffered an abortion at about the fourth month of gestation. Her catamenia had continued regularly and naturally in all respects. Lately, her general health had greatly suffered, and she was now unable to walk more than a square without stopping to rest. She had the appearance of decided prostration; was pale and anæmic, and greatly reduced in flesh. Her form was about that of a woman six months advanced in pregnancy. Pressure over the hypogaster elicited the expression of considerable pain.

Suspecting the existence of ovarian disease, I appointed the day following to make the necessary examination—the result of which decided me as to the existence of a fibro-cystic tumor of the right ovary. The next day, I invited my friend, Dr. F. B. Watkins, to visit the patient, and give me the advantage of his experience in deciding upon the correctness of my diagnosis. After a partially satisfactory examination, he decided to suspend further efforts at reaching a conclusion for the present, and suggested that we request the additional advice of Drs. Hunter McGuire and O. Fairfax on the next day. Both of these gentlemen kindly attended, and, after a most careful examination, all concurred in the diagnosis stated above. It was further agreed that nothing more could be done at present than support the general health, and await the necessity for ovariectomy, which operation, it was believed, would soon be demanded.

On the 26th (June), having decided to try ergotin in the case, I invited Dr. Landon B. Edwards to see and examine the patient, and advise me as to his judgment in the premises. After

careful examination, he expressed entire satisfaction with our diagnosis, and urged the use of the proposed remedy.

On *July 16*, her strength being considerably recruited by the use of tonics, &c., I gave five grains Squibb's ergotin, dissolved in five drops distilled water, under the skin of the left arm, near the insertion of the deltoid muscle. This was repeated every day, alternating between the two arms, with the exception of five days, viz.: from the 23d to 28th, during which period it was suspended on account of the appearance of the catamenia (nearly a week too soon). Before commencing the treatment, the patient measured, around the largest part of the hips, 32 inches. Full notes were kept each day, and from these I find that from the time of the first administration of the medicine, the patient complained of violent uterine contractions, nausea, vomiting, faintness, and a peculiar "weakness in the breast," accompanied on the 20th by severe headache and slight chill. She reports "a teacupful of fleshy lumps" as having passed, together with the menstrea.

July 31. Patient measures 27 inches; complains of shortness of breath, extreme nausea and headache; painful urination.

August 3. Complains of uncontrollable drowsiness, and is compelled to sleep two or three hours after each administration of the remedy.

August 6. Ergotism so decided as to make it proper to suspend the treatment. Patient measures 26 inches.

October 6. Patient measures 27 inches. Treatment resumed every other day to November 3d, with the exception of five days (from 14th to 19th), when it was suspended on account of the menstrual period. The symptoms of nausea, &c., detailed above, returned with the repetition of the drug, but in minor degree till the 22d, when decided ergotism again became manifest. She measures to-day 28 inches; has gained much both in health and strength, and is able to do general housework for a family.

November 3. Patient complains of an intoxicated feeling about the head, together with syncope and exceeding drowsiness. Treatment finally suspended.

November 6. Left ring finger on index side, near the nail, is painful, and shows a small festered bump, the size of a mustard seed. The tumor is hard, and no fluctuation can be detected.

December 26. Sores similar to the above appear on the first and second phalanges of the right little finger; also on the end of the left thumb and middle finger. Several of these pustules sloughed, leaving small, painful ulcers, which slowly healed without treatment.

May 1, 1875.—A slough the size of a quarter dollar sepa-

rated from the anterior portion of the left leg, at the junction of the middle with the lower third. The remaining ulcer was very painful, but healed kindly under treatment with nitrate of silver.

August 7. Drs. McGuire and C. W. P. Brock present. Upon examination to-day, no change in the condition of the tumor is noted since report of November 6th.

Respiration, temperature and pulse were carefully noted five minutes before and five minutes after each dose of the medicine, with the following result :

Mean respirations per minute	before	taking the remedy	.....	26
“	after	“	“	.....23
Mean temperature	“	before	“	.....99°F.
“	“	after	“	.....99°F.
“ pulse	“	before	“	.....74
“	“	after	“	.....71

June 1, 1876. Dr. Edwards saw the patient with me to-day. She is in excellent health, and suffers no inconvenience whatever from what remains of the tumor, it being altogether indefinable. No undue prominence of the abdomen will be remarked, unless upon careful inspection.

Resections of the Inferior Maxilla for Injuries Caused by Gun-shot Wounds and Enchondroma. By THOS. B. WILKERSON, M. D., Young's Cross Roads, Granville county, N. C.

Case 1.—Ligation of the Right Primitive Carotid Artery—Recovery.—Private A., Louisiana regiment, C. S. A., wounded near Winchester, Va., June, 1863, by a Minnie ball, which entered the inferior maxilla, one and a half inches from the symphysis menti, ranging backwards along the bone, making its exit just beneath the lobe of the right ear. This man bled freely on the field, but the hæmorrhage was arrested by his surgeon. On the fourth day after his admission into Jordan Springs Hospital profuse secondary hæmorrhage took place, bleeding from the orifice near the ear and gushing forth in a full stream from his mouth. From the course of the ball it was inferred that both internal and external carotids were wounded.

In consultation with Surgeons Hagy, Newton, and Hunter, I determined to ligate the primitive carotid as the first step of the operation. Assisted by the medical gentlemen above named, the man was placed under the influence of chloroform and the carotid artery compressed against the trachea as low on the neck as possible, and the head turned to the left side. I made an incision along the inner border of the sterno-mastoid from a point

below the angle of the jaw to near the cricoid cartilage, three inches in length, through skin, superficial fascia and platysma, and the deep fascia was carefully divided on a director, when the sheath of the artery was reached and opened. Carefully avoiding the loop of the descendens noni, the ligature was thrown around the artery just before its division into its main branches. This wound was closed and the seat of fracture examined. The bone was found completely shattered and the spicula denuded of periosteum along the whole tract of the wound. I determined to resect the bone by making a curved incision along the base of the jaw from the point of exit of the ball to its entrance, one and a half inches from the middle of the chin; the facial artery was secured, it having been injured by a fragment of bone. The flaps were freed from their attachment and a dozen spicula of bone completely denuded removed; these fragments constituted the body of the maxilla. The angular portion of the jaw was found stripped to near its coronoid process; near this point a chain-saw was passed around and the bone divided. The end of the chin fragment was likewise sawed off as far back as denuded. The periosteum was carefully protected during the operation. The internal carotid was found divided by the ball, and its proximal and distal ends secured by ligatures. Wound closed by sutures and adhesive plaster. This man reacted slowly; his stomach rejected everything for forty-eight hours. He was given a pill composed of pulv. opii, quiniæ sulph., and camphor, each one grain, every four hours, watching the opiate. An angular splint was made of binder's board, cut and moulded to fit the outline of, and extending from the angle of one maxilla to that of the other, the anterior border of which splint was turned up on the face three-quarters of an inch all around, and nicked at the chin to facilitate this, the splint being covered with lint pasted on with dextrine. After the latter dried, a coating of copal varnish was applied. A window was cut corresponding to the line of wound. This apparatus was fastened on by a broad bandage under the chin, fastening on top of the head; a narrow piece of webbing was attached to the board near the chin of the affected side and carried obliquely backwards behind the ear and across the occiput, to be attached to a wide bandage coming from the chin—the whole secured by a strip around the brow and back of head. The oblique strap tends greatly to prevent the dragging of the chin fragment towards the sound side. This splint affords a good support to the parts, maintaining the regular outline of the jaw during the reparative efforts of nature.

This man did well, notwithstanding the gravity of the injuries. During the suppurative stage, the discharge from the

mouth becoming very offensive, the following wash was directed to be used: Tinct. ferri chlorid. ʒj, creosote gtt. iv, water ʒviij. This was used in the mouth as a detergent. The ligature separated from the primitive carotid on the 18th day without hæmorrhage, and under a generous diet and tonics he ultimately made a good recovery.

This patient was seen towards the latter part of the war; he presented a good appearance, with but little deformity—the bone entirely reproduced.

Case 2.—Restoration of Ramus of Lower Maxilla after Resection.—Private A., of a North Carolina regiment, wounded near Spotsylvania Courthouse, 1864, in the left lower maxilla. The ball entered near the angle of the jaw and made its exit half inch to the inner side of the middle of the chin on the left side, completely grinding the bone into fragments in its passage. There was some hæmorrhage. This man being placed under the influence of chloroform, assisted by Surgeon Hagy, I made a straight incision along the base of the jaw from the angle to the point of exit of ball. The attachments of the flaps were separated from the bone, and the facial artery secured by a ligature; all loose spicula of bone removed. The angular portion was found denuded up to the commencement of the ascending ramus. At this point it was removed by the chain-saw, and whilst the tongue was drawn forward and held, the remaining fragment was severed at the symphysis. The blood was kept sponged from the mouth during the operation, all bleeding vessels having been secured. The wound was closed by the interrupted suture and strips of adhesive plaster, and the fracture apparatus described in case No. 1 applied. Patient to be fed on sweet milk and rich soups; the iron and creosote mixture to be used as a hæmostatic and detergent mouth wash. This case did well, making a good recovery.

He was seen in 1865. There was but little deformity, the mouth being drawn slightly to one side, but scarcely discernible. There was complete restoration of bone, giving a fine solid lever.

These cases will serve as typical examples of the general course of treatment pursued by me, during the late sectional war, in gun-shot wounds of the inferior maxilla. I examined carefully and removed all loose spicula of bone denuded of periosteum, through the wound inflicted by the ball, if possible; if not, an incision was made amply sufficient to accomplish the purpose. By this course of treatment, nature was given the best chance to repair the mischief that had been done. If these wounds were

not attended to, and nature alone allowed to attempt the cure, the effort frequently resulted in a fistulous orifice in the face, discharging an offensive matter—both externally, greatly to the discomfort of the patient, and internally into the mouth, impairing the appetite and wasting away the vital energies of the patient. Years and years will glide by thus, and the futile efforts of nature to repair the injury done will be no nearer a favorable solution of the difficulty than at the time the wound was inflicted. The attention of the medical gentlemen with whom I was associated during the latter years of the late war was particularly directed to this subject, and the favorable results looked for in these cases attracted the marked attention of my distinguished friend, Dr. Harvey Black, at that time surgeon-in-charge of the famous Second Corps Hospital (now Superintendent of the Eastern [Va.] Lunatic Asylum), with whom I was officially and intimately associated to the end of the war.

Case 3.—Resection of Half of Lower Maxilla for Enchondroma—Death.—Thomas D., æt. 54, a brickmason by trade, has enjoyed good health, with the exception of a slight cough, due to a gun-shot wound of the right lung. Ancestral history as to any hereditary taint uncertain. He consulted me December, 1874, in regard to a growth in the mouth. This extended along on each side of the alveolar process of the right inferior maxilla from the middle of chin to the angle of the jaw—lobulated and of a pinkish hue. It had a firm, fibrous feel, about the size of an ordinary hen's egg; at the angle of the jaw all the teeth had been loosened and displaced by the advance of the tumor; it presented the general appearance of an epulis. The jaw was almost completely ankylosed, and the projection of the growth across the throat rendered deglutition difficult and painful.

Trusting that the disease would prove non-malignant (and at that time it appeared to be a benign growth), January, 1874, assisted by Drs. Young and Clack, of this county, the patient being under the influence of chloroform, I made a curved incision along the base of the lower jaw on the right side from the angle to near the corner of the mouth; this cut was continued upwards, dividing the lip at the corner. The facial and labial arteries were secured as soon as divided; the flap was dissected up, and the bone, both at the symphysis and at the angle, sawn downwards to the lower part of the alveolar process. An incision having been made through the gum from one sawed line to the other,

the whole alveolar process between these points was cut off by strong bone pliers; wound closed with silver wire. He recovered rapidly, the wound healing by the first intention: apparently doing well for the first three months. At the expiration of that time the disease commenced to return at the angle of the jaw; he suffered now excruciating pain in the diseased bone; the tumor spread rapidly along the bone, its appearance having undergone a complete change—its hue fiery red and its surface easily broken down with the finger. The malignant character of the growth was no longer to be doubted: it was now evidently a true enchondroma.

I determined to remove the entire half of the affected jaw. April 9th, 1874, assisted by Dr. Clack—the patient fully under the influence of an anæsthetic compound, composed of one part chloroform and two parts sulphuric ether, by measure, and the facial artery being controlled—I made a curvilinear incision from the lobe of the ear along the base of the jaw, following the line of the cicatrix to near the corner of the mouth, dividing the lip at the same point as in the previous operation. After securing all the bleeding arteries, the flap was dissected up and held back by an assistant. A strong aneurism needle, armed with a silk ligature, was then passed under the bone at the corner of the mouth; to this thread a chain-saw was attached and drawn through, and the bone divided at this point. Seizing the divided end of the diseased fragment, I passed a probe-pointed bistoury under it and separated the soft parts from it to near the articulation. Withdrawing the knife, it was passed in front, dividing the temporal attachment to the coronoid process; and whilst the bone was drawn downwards and forwards, the knife was carried along the neck of the bone, the joint entered, and the articular attachment divided without wounding the external carotid or internal maxillary. The bleeding was very free, requiring fourteen ligatures to control the hæmorrhage. All suspicious tissues were removed. The wound was closed by silver wire and adhesive straps. He was directed to use the detergent mouth wash, and was given iron and quinine and a nutritious liquid diet. Under this treatment he recovered rapidly. Eight weeks after the operation, he was able to attend to his business. Continued well for eight months; at the expiration of that time a teat-like growth commenced in the cicatrix at the angle *again*. In spite of caustic, the disease continued to advance slowly along the line of the cicatrix. About this time he consulted my distinguished friend, Dr. Hunter McGuire, of Richmond, Va. He suffered very little after the last operation—more mentally than physically. His appetite continued excellent to the date of death,

fourteen months after the operation. The disease destroyed a portion of the tissues at the angle towards the last, forming a fistulous orifice, thereby hastening the fatal termination. Notwithstanding every effort to prevent the escape of food through this opening, a sufficient quantity of nutriment could not be swallowed to maintain life. The man died partly from inanition.

The profession will note the great tendency in this case of the disease to return at the point where it first commenced. Each time it showed itself first at the angle of the jaw, and that was the first point of origin, showing that the tissues at that point had become more deeply imbued with the carcinomatous poison than at any other place.

Cases of Membranous Croup. Reported by S. B. BOYD, M. D., Knoxville, Tenn.

As a number of cases of membranous croup have occurred in the practice of my brother, Dr. John M. Boyd, and thinking they would be interesting to some of your readers, I make a report of them. He has had (see table) ten cases. The treatment of all was very much the same—mercury and some nauseant, either tartar emetic (when the patient was strong enough to bear it) or syrup of ipecac, with the use of lime water by the atomizer. Of the ten cases, two died and the rest recovered. He performed tracheotomy in two cases, with one recovery. In one, the membrane was coughed up entire, and is now preserved in alcohol. In one patient, there were two attacks inside of six weeks.

No.	Name.	Age.	Duration	Result.	REMARKS.
1	— Sullivan .....	.....	3 days.	Recovery.	Membrane coughed up July 15, 1873.
2	Corrine Scales.....	6 yrs	4 "	"	Laryngo-tracheotomy April 9, 1874.
3	Eddie Baughman..	30 mos	6 "	Died.	Operation Dec. 21, 1874.
4	Mike Gleason.....	1 yr	5 "	"	Death in 10 hours.
5	Eldridge Scales...	3 yr	6 "	Recovery.	Physician called 4th day
6	Maud Perry.....	6 mos	5 "	"	Boy deaf mute.
7	Elizabeth Henry..	5 "	4 "	"	1st attack March 30—
8	Dennis Gleason...	3 yrs	5 "	"	April 3, 1876.
9	Ethyl Lyons.....	7½ "	3 "	"	Attacked April 20, 1876
10	Maud Perry.....	7 mos	4 "	"	" " 20, "
					" " 23, "
					" " 23, "
					(second attack).

Correspondence.

Pulmonary Tuberculosis—Eat Fat Meat.

Mr. Editor,—If you will allow me to relate concisely the history of a case of pulmonary tuberculosis of recent date, with some practical remarks in the loose style of a letter, you can use the same as you see fit.

On April 19, I received a call to visit Mr. J. S. C., 25 miles below here, on the Ohio river, to meet Dr. Charles C. Norman in consultation, and was requested to bring certain instruments with me in order to make out a correct diagnosis. Then, to board a boat, leave many cases behind, and steam down the river in a pleasant afternoon at the rate of ten miles an hour, is rather pleasant, when compared with many of the hardships of professional life.

But still, it all meant *business*. The gentleman had been sick for some time, and from various opinions expressed by physicians, the question was, "What ails the man?" Dr. Norman had pronounced it a case of phthisis pulmonalis; others bronchitis; and, perhaps, some said it was just *bordering* on this, others on that. So, if he got well, it would be "*I told you so*," and if he became permanently diseased, it would be the same. This practice, you remember, was very common in the East when the Oracles were asked to foretell future events. Croesus went to war with Cyrus with the assurance that a kingdom would be destroyed, when, lo! it was his own, not the other man's.

But I return to the point. As a rule, when a person has been sick for some time with some pulmonary trouble, he is not merely bordering on disease, but already has some definite complaint, which is clearly disclosed by physical signs and symptoms. Of course, I do not mean to say that there is not a time when the disease is being established, and that there is a beginning—a slight departure from health, in which one could not make a correct diagnosis—a general impairment of health before there are tuberculous deposits in the lungs.

The patient had been sick for two or three years. He had had pulmonary hæmorrhage. When I saw him, he was in bed;

had lost flesh. There was a cough, with some expectoration. The pulse about 100 per minute. These symptoms raised the presumption of consumption, but were not sufficient to hinge an opinion upon. Moreover, I asked the gentleman, as is my habit in all such cases, if he liked *fat meat*? "*No*;" he replied, "*I could never bear it.*" And when I get such an answer from one who eats but little, and who has lost a relative from phthisis for three generations back, I immediately suspect that he has tubercles, or soon will have. Yet, we are not to base an opinion on what we suspect, but on the history of the case, its signs and symptoms, and give explanations and details that would stand before a judicial investigation. If one cannot do so, then he is incompetent to give an opinion as to any particular disease of the chest.

But what did percussion and auscultation reveal in the case before us? There was marked dullness in the right infra-clavicular region. Well, what of that? Just this: it had to be marked to indicate disease beneath, because there is a normal disparity here, viz.: this region, as a rule, is less resonant than the left lung in the same region. Then the abnormal dullness at the apex of the lung was significant; for this is where tubercles are generally located—in fact, nearly always so. But what did auscultation disclose in this dull spot? There was the sub-crepitant râle, and also bronchial respiration. How explain them? Well, evidently the bronchial respiration was the result of consolidation of the apex of the lung from tubercular infiltration. But what caused the sub-crepitant râle? It came from one of two things. It is the sign of capillary bronchitis, except when the indications are otherwise. The patient was expectorating muco-purulent looking matter, which I thought came from the softening of the tubercles, which I believed was going on, and the matter in the minute bronchial tubes caused the sub-crepitant râle. Vocal resonance here was exaggerated. But what did I find in the left lung? The crepitant râle. Well, what did this mean? It meant, in my opinion, that there was a slight deposit of tubercles in the left lung, whose presence had induced pneumonia.

I could go into a differential diagnosis of other affections of the chest, based on the special characters of the different physical

sounds, but it would be contrary to the intent of this letter. Sufficient has been adduced to confirm the diagnosis of Dr. Norman.

The treatment consists of tonics and nutritious diet, and a general supporting plan of treatment. He has taken cod liver oil and many other things to build up the system. His blood must be made rich and pure before his lungs begin to heal. The blood is where the derangement first begins, and it must be renovated as much as possible.

Now, I wish to make a practical suggestion, from what has been said, with regard to fat meats. If people wish to be healthy, they must eat meat with other essential ingredients. Yes, but one will say, "I do not like it." Well, the answer should be, you must take it, or *do worse*. In the every-day business of life, all have to do things they do not like, or make an utter failure. So people must eat meat, no difference whether bacon, beef or fish, if it contain oleaginous material in sufficient quantities, or they are not likely to be healthy. More particularly is this true with regard to those with strumous habit. Some are afraid their delicate children cannot stand fat meat. My instruction and advice, when I am asked, is to feed children on meat for breakfast and dinner any how, and let them have it for supper if they want it. Show me a greasy-mouthed child, and one who clamors for meat at meals, and I will show you one that is red and rosy—one that does not look weak and sickly, but is full of vigor and life. It does me good to see such children, and I have many in my mind now. To be sure, butter eaten in large quantities would answer the demand for oils.

There is an old idea that children who study, and students at boarding-schools need but little nourishment. Many a youth has been sent to his grave by such nonsense, such ignorance, such an outrage upon the laws of nature. Why do so many girls have their menses suspended at boarding-schools? Because they are not fed as they should be. They are taught to be delicate, shun rich diet, live on dainties; and then they will soon decline. No boarding-school should exist unless the inmates are properly fed.

Besides, persons who are in delicate health, who dislike fat meats, if they will begin on small quantities at first, and take

them regularly, the system will improve in health; and then there will be a demand for such food, instead of loathing it.

I beg pardon, as I have said more than I intended. But when any one will not eat meat, admonish him of the great danger of consumption, especially if a relative has died of it.

JOHN L. COOK, M. D.

Henderson, Ky., May 24, 1876.

Hypodermic Use of Morphia in Sea-Sickness.

Mr. Editor:—In February last, during a dreadful storm at sea, I tried the effects of a subcutaneous injection of morphia over the epigastrium for the relief of intense nausea and other symptoms of sea-sickness. I used the remedy in two cases, and in both the effects were very happy. The distressing symptoms were relieved in about fifteen minutes, with no recurrence of the same. The dose which I used was minims v of Magendie's solution of morphia.

This has been penned in the hope that it will encourage others to give the remedy a further trial. JNO. W. DILLARD, M. D.

Riverville, Va., May 28th, 1876.

Correction.

Mr. Editor:—In the May No. of your journal you state that your Baltimore correspondent erroneously credited Roberts, of Manchester, with the original observation that the temperature is always lowered in uræmia intoxication, and claim the credit (on his own authority) of that discovery for Dr. Bourneville. As it was I who ascribed that discovery to Roberts, in relating a case of infantile convulsions before the Baltimore Medical and Surgical Society, and caused your reporter to make the mistake, I write this to say that I had no intention whatever of depriving Dr. Bourneville of the high credit he deserves for the important and useful discovery in question, but that I made the mistake quite unwittingly. I had not seen, when I made the statement, the papers of either Roberts or Bourneville. My information was derived from an extract from the *Obstetrical Journal of*

Great Britain and Ireland, which summed up the conclusions of Bourneville himself in his work entitled "Clinical and Thermometrical Studies of Diseases of the Nervous System," and gave the impression that Bourneville himself attributed the originality of the discovery to Roberts. I have since hunted up the extract and find that my impression was correct, and the responsibility for the error, therefore, rests upon the journal above mentioned. Unfortunately I am unable to give the No. of the *Obstetrical Journal* from which the extract was made, but infer that it was sometime during the latter part of the year 1873 or early in 1874.

JOHN S. LYNCH, M. D.

Baltimore, Md., May 29th, 1876.

Proceedings of Societies.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

[Reported by R. A. New, M. D., late Secretary, Port Gibson.]

The ninth annual session of the Mississippi State Medical Association was held in the Hall of Representatives, Jackson, beginning Wednesday, May 31st, at 11 A. M.

The retiring president, Dr. P. F. Whitehead, introduced Dr. M. S. Craft, the present presiding officer. The house being called to order, the session was opened with prayer by the Rev. C. B. Galloway, of Jackson.

Dr. Robt. Kells, chairman of the Committee of Arrangements, in behalf of the physicians of Jackson and of the Hinds County Medical Association, in a neat and appropriate address, welcomed the Association to the city of Jackson.

The Permanent Secretary, Dr. R. A. New, being absent, on motion of Dr. P. J. McCormick, a temporary secretary was chosen; and, on motion of Dr. W. M. Compton, Dr. Wirt Johnston was requested to act as such.

The President then delivered his annual address. On motion of Dr. S. V. D. Hill, the thanks of the Association were tendered the President for his able address. Dr. McCormick having been called to the chair, a committee, consisting of Drs. Hill, McCormick, and Galloway, was appointed to report on the President's address.

The Secretary having now arrived, on motion of Dr. Whitehead, Dr. Wirt Johnston was appointed to act as assistant.

The roll being called, the following named members responded

to their names: Drs. William Aills, P. T. Bailey, J. W. Bennett, J. L. Carter, J. A. Campbell, W. M. Compton, M. S. Craft, K. Fowler, C. B. Galloway, C. R. Henderson, S. V. D. Hill, Wirt Johnston, Robert Kells, B. F. Kittrell, George Latimer, D. McCallum, P. J. McCormick, T. J. Mitchell, R. A. New, A. G. Smythe, J. M. Taylor, C. Y. Thompson, R. G. Wharton, P. F. Whitehead, H. C. McLaurin.

A communication was read from Dr. W. M. Compton, Superintendent of the State Lunatic Asylum, extending a cordial invitation to the members of the Association to visit the institution at any time that may suit their convenience. On motion, the invitation was accepted and referred to the Committee of Arrangements.

Dr. McCormick was called to the chair. The names of Drs. George K. Harrington, James McWillie, and Theodore Artaud, of Jackson, recommended by Dr. M. S. Craft, were presented, and they were elected to membership. Dr. A. E. Hardin, representative of La Fayette County Medical Association, was duly elected. Drs. J. M. McFarland, of Water Valley, R. B. Johnson, of Madison county, Henry Izard, of Garlandsville, C. A. Rice, of Brandon, W. W. Hall and William Powell, of Grenada, delegates of Grenada Medical Association being duly recommended, were elected to membership.

On motion, the Association adjourned to 3 o'clock P. M.

Afternoon Session, 3 P. M.—President in the chair. The Legislative Committee reported verbally that the Legislature was not prepared to act for the benefit of the profession at the time of the last session, but the belief was expressed that next year an active committee might accomplish something, as the duties of the last Legislature were peculiar. Dr. J. M. Taylor moved that the report be received, the committee be discharged, and that a new committee be appointed with a view to more comprehensive action.

Dr. Taylor read a very important paper in reference to the necessity for legislation in matters pertaining to the medical profession. Dr. Hill followed with remarks on the same subject, and propounded the questions, "What are the remedies?" "What shall we do?" and offered a substitute that a committee of three be appointed to have the matter under advisement and report in the morning session. The substitute prevailed, and Drs. Taylor, Compton, and McCallum were appointed said committee. On motion, the name of Dr. Kells was added to the committee.

The committee on the President's address reported. Report received and adopted, after amendment.

The Committee on Necrology reported, through Dr. A. G. Smythe, the death of Dr. John R. Coffman, of Grenada, an obituary notice of whom was read, and, on motion, ordered to be spread upon the minutes.

The Committee on Medical Hygiene reported, through Dr. McLaurin, verbally, that no facts had been furnished the committee. On motion of Dr. Compton, the committee was continued and authorized to select its own chairman.

The report of the Committee on Publication was called for, but no report was presented. Dr. Hill moved that the Committee on Publication for next year be composed of physicians of Jackson. Motion carried. Drs. Kells, Bailey, and Johnston were appointed said committee.

The Permanent Secretary was granted further time to report.

The Treasurer made a verbal statement that no funds had passed through his hands, but that the Committee on Publication had the funds in their possession.

The Committee of Arrangements reported, as the order for the session, to meet this evening at 8 o'clock; to-morrow at 9 A. M.; continue in session until 2 P. M.; at 3 P. M. to visit the Lunatic Asylum, and at 8 P. M. to hear the annual oration.

The committees on special medical topics were called on for reports. Dr. B. F. Kittrell read an interesting paper on Hemiplegia. He was followed by remarks on the same subject by Drs. R. G. Wharton and S. V. D. Hill. On motion, the Association adjourned to meet at 8 P. M.

Evening Session, 8 P. M.—President in the chair. Dr. Compton read an elaborate and deeply-interesting paper on Idiopathic Softening of the Brain, accompanied with a diagram and demonstration of the blood vessels. He was followed by remarks on the same subject by Dr. Hill. On motion, the thanks of the Association were tendered Drs. Kittrell and Compton, and their papers were ordered to be placed in the hands of the Committee on Publication. Dr. Compton asked the privilege of revising and condensing his paper, and, on motion of Dr. Whitehead, the privilege was granted.

On motion, the Association adjourned.

Second Day—Morning Session.—The Association met pursuant to adjournment at 9 A. M., the President in the chair. Roll called. Proceedings read, and, on motion, adopted as read.

A communication was read from Dr. Hanslow, Secretary of Copiah County Medical Society, and, on motion, the Permanent Secretary was requested to furnish Dr. Hanslow a copy of the proceedings and the requisitions for membership; amended by Dr. Hill, that the President and Secretary be authorized to dispose of the matter as they deem best. Amendment passed.

Communications were read from Drs. D. A. Kinchloe, John Wright, and D. A. Kinchloe, Jr., of Sardis—the latter making application for membership. He being properly recommended, was, on motion, duly elected a member of the Association.

Dr. R. Fowler presented a paper on Capillary Bronchitis in Children. On motion of Dr. Whitehead, the thanks of the Association were tendered Dr. Fowler for his very interesting paper, which was directed to be given the Committee on Publications. Dr. Hill offered extended remarks on the subject of which the paper treats, followed by Drs. Bailey, Wharton, and Rice.

Dr. McCormick called to the chair. The Committee on Legislation, through Dr. Taylor, reported. Dr. A. G. Smith moved the reception and adoption of the report. Motion prevailed. Dr. Smythe also moved that the blank number of names referred to in the report of the Executive Committee be filled with not less than seven names. An amendment was offered by Dr. Compton to have thirteen names inserted, and that a sub-committee of three by the committee of thirteen be authorized to act as a quorum to transact the business of the committee. Remarks of interest were made by Drs. Compton, McCallum, Hardin, Taylor, and others, on the great importance to the profession to actively engage in effecting something beneficial to the physicians of the State through legislative action. A resolution of Dr. Compton was read, and, on motion, adopted.

The Secretary read an invitation from Dr. and Mrs. Craft to the members of the Association—that they will be glad to have them present at their residence this evening at 9 o'clock.

Telegrams were read from Dr. E. G. Banks, orator elect for this evening, and Dr. R. A. Quin, alternate, stating their inability to be present; consequently there will be no annual oration this session. Dr. Wirt Johnston was unanimously requested to fill the vacancy; but, after thanking the Association for the honor conferred, respectfully declined. The whole matter, on motion of Dr. Compton, was referred to the Committee of Arrangements.

Inasmuch as to-night Dr. Compton designs leaving for the American Medical Association, and being deemed worthy the honor, he was unanimously appointed a delegate to the said Association.

Dr. Hill had been appointed to read a paper on Hæmorrhagic Malarial Fever, but made verbal statements on the subject, as his paper was not ready. Remarks pertinent by him were made.

Dr. Taylor was called to the chair. Dr. McCormick entertained the Association with remarks concerning Malarial Fever.

Dr. Hill, on motion of Dr. Whitehead, was requested to furnish for publication a paper on the subject discussed.

Yellow Fever, with its differential diagnosis from other fevers, was the subject appointed for Dr. P. F. Whitehead to prepare a special paper; but, not being ready with a written report, as he had nothing new on the subject, after making a few remarks, by his request, the President, Dr. Craft, was induced to make statements concerning the disease; who, in a clear and concise style, defined the distinctive features of yellow fever. Drs. Hill, Mitchell, and Bailey followed with interesting remarks. An animated discussion as to the differential diagnosis of yellow fever from other fevers occurred. Dr. Taylor was called to the chair pending the discussion. In view of the time being limited, on motion of Dr. Hill, the discussion was suspended for the present, inasmuch as other important subjects had to be entertained. Dr. Galloway moved that Drs. Bailey and Mitchell be requested to prepare and present papers on Yellow Fever at the next annual meeting of the Association. Motion prevailed.

A paper on Electro-Therapeutics was read by Dr. Wharton, and specimens of casts in plaster of a hand and foot were presented, exhibiting the effects of atrophy of the muscular system.

The hour of adjournment having arrived, on motion, the further reading of the paper was postponed until the meeting this evening. On motion, adjourned until 8 P. M.

Evening Session.—Association met at 6:30 P. M., the President in the chair.

Dr. Wharton proceeded to finish reading his report on Electro-Therapeutics, which was interrupted by the adjournment of the morning session. On motion of Dr. Taylor, the report of Dr. Wharton was received and referred to the Committee on Publication.

The President announced the following committees: Medical Topics: Drs. J. M. Taylor (chairman), B. F. Kittrell, and C. R. Henderson; on Nominations to International Medical Congress and American Medical Association: Drs. S. V. D. Hill (chairman); W. W. Hall, and C. A. Rice.

Dr. Taylor, being called upon, reported several cases of necrosis, and read an interesting paper on the antiseptic treatment of wounds. Some interesting remarks were made on this subject by Drs. Hill, Whitehead, Rice, McCormick, and Smythe. Thanks were tendered Dr. Taylor for his valuable paper, and, on motion, it was referred to the Committee on Publications.

A report on the Topography and Diseases of North Mississippi, by Dr. E. W. Hughes, was presented, and referred without reading to the Committee on Publications.

Dr. B. F. Whitfield read a paper on Indigenous Remedies. Paper referred to Committee on Publications.

The paper sent by Dr. Banks, on Chloroform and Ether, was referred without reading to the Committee on Publications.

Dr. C. B. Galloway read a paper on Diphtheria. On motion of Dr. Taylor, it was referred to Committee on Publications. Dr. G., in the meanwhile, requested the privilege of revising, which was granted. Remarks in reference to Diphtheria were made by Drs. Taylor and Hill.

The Committee on Nominations reported as delegates to the American Medical Association, Drs. Compton, Vaughan, Lipscomb, Izard, Bailey, Wharton, McLaurin, Harrington, Thompson, Hardin, Wright, Whitfield, Craft, Campbell, Latimer, Taylor, and Henderson. To International Medical Congress, Drs. Kells, Whitehead, Smythe, Hughes, Wirt Johnson, and Hill. Report received and adopted.

On motion, Association adjourned until to morrow at 9 A. M.

Third Day—Morning Session.—Met at 9 A. M. President in the chair. Calling the roll dispensed with. Proceedings read and adopted.

Dr. Craft was appointed to present a paper on Surgical Affections of the Rectum; the paper not being presented, on motion, he was continued chairman of the same committee.

A paper by Dr. Wirt Johnson, on Syphilitic Affections of the Nervous System, was read by the Secretary. Dr. Hill mentioned a case of importance which occurred under his treatment, of syphilitic gummata of the membranes of the brain, anterior lobe of the left hemisphere. Case graphically described. Complete recovery of the case. Thanks tendered Dr. Johnston, and paper to be placed in hands of Publishing Committee.

A paper sent by Dr. Stockard, on motion of Dr. Kells, was passed over. Dr. Kells presented his excuse for not being ready with his paper.

On motion of Dr. Whitehead, Dr. Kells was continued as chairman of Committee on Insanity.

Dr. Smythe read a paper on the Use of the Forceps in Obstetrics. Paper received and referred to Committee on Publications.

The report of Dr. P. F. Whitehead, chairman of Committee of Delegates to the American Medical Association in 1875, was read, received, and adopted.

Dr. McCormick was continued as chairman Committee on Modern Treatment of Fractures.

Dr. Taylor offered a resolution, expressive, relative to the visit of the fellows of the Association to the asylum for lunatics. Pa-

per adopted. Resolution of Dr. McCormick presented and adopted. Dr. Craft added to the Committee on Publications, on motion of Dr. Kells. Committee on Special Topics reported through Dr. Taylor. Report adopted.

Election of officers then ensued, which resulted as follows: Dr. P. J. McCormick, President; Dr. R. G. Wharton, 1st Vice-President; Dr. A. G. Smythe, 2nd Vice-President; W. W. Hall, 3rd Vice-President; Dr. D. C. McCallum, 4th Vice-President.

Dr. Kittrell offered the following resolution, which was adopted:

Resolved, That the resolution creating the office of Permanent Secretary be hereby repealed, and that a recording secretary shall hereafter be elected annually, as originally provided in the constitution.

It was further stated that it was important that the Publishing Committee and Secretary should be near each other, so as to be in regular communication.

Dr. Wirt Johnston was elected Recording Secretary; Dr. C. A. Rice, Corresponding Secretary; Dr. R. Kells, Treasurer; Dr. B. F. Kittrell, Orator, and Dr. M. S. Craft, Alternate.

Dr. Taylor offered the following resolution, which was adopted:

Resolved, That no alterations or amendments to the constitution or by-laws of this Association shall be made at the same meeting at which the same are proposed, and that all laws and resolutions conflicting with this resolution are hereby declared void:

Resolution of thanks to physicians and citizens of Jackson, by Dr. Taylor, adopted.

On motion of Dr. Hill, the Association appropriated the sum of twenty-five dollars to cover the necessary expenses attending the duties of the office of Permanent Secretary (now vacated), formerly filled by Dr. New.

Dr. Hill offered also a resolution expressive of the thanks of the Association to the retiring President, Permanent Secretary, and Treasurer.

The President announced as the Committee of Arrangements, Drs. W. W. Hall, E. W. Hughes, and Wm. Powell; and the Executive Committee, Drs. J. M. Taylor (chairman), Wm. Comp-ton, Robt. Kells, E. G. Banks, P. F. Whitehead, R. G. Wharton, B. A. Vaughan, A. G. Smythe, D. C. McCallum, E. W. Hughes, B. F. Kittrell, S. V. D. Hill, and H. C. McLaurin.

On motion of Dr. Hill, delegates were appointed to the Virginia and Alabama Medical Associations—Dr. C. A. Rice to Virginia, and Dr. J. M. Taylor to Alabama.

Thanks of the Association were tendered the Committee of

Arrangements for forethought, kindness, attention, courtesy and faithfulness in the discharge of duty.

No further business appearing, the Association adjourned to meet on the first Wednesday in April, 1877, in Grenada.

KING WILLIAM COUNTY (VA.) MEDICAL SOCIETY.

(Reported by Geo. Wm. Pollard, M. D., Secretary.)

At a stated meeting of the King William County [Va.] Medical Association, held at the Courthouse May 4th, 1876, suitable resolutions expressive of the deep regret of the body at the death of Dr. G. W. Gwathmey, an Honorary Fellow, were passed.

The discussion of the selected subject, *Uterine Hæmorrhage*, was opened by Dr. J. B. Moore in an elaborate and able manner. Most of the Fellows present participated in the discussion, making it exceedingly interesting.

At 2 P. M., the Association adjourned for three-quarters of an hour for dinner, which had been prepared by members of the Association residing in the neighborhood of the Courthouse, and to which the Fellows addressed themselves with as much zest as they had previously done to "*Uterine Hæmorrhage*."

In the afternoon Dr. Littlepage reported a case of dropsy, in which the *food was discharged through the umbilicus*—fish roe, milk, &c., being discharged undigested, and without change. Paracentesis was not performed. Death after three weeks.

A Report of a Case of Removal of the Remains of a Fœtus per Annum was read by John Lewis, M. D., which case was considered so very remarkable that the report was, on motion, requested of Dr. Lewis for publication in the *Virginia Medical Monthly*.

"On the morning of April 19th. 1864, I was called to see a negro woman, about 35 years old, thought to be laboring under chronic dysentery. I found her feeble, very much emaciated, and confined to her bed. Upon inquiring into the case, all the information elicited was that she had been laboring for several months with chronic disease of the bowels; frequent discharges from the bowels, mixed with blood and purulent matter with the fœces.

Of the previous treatment of the case, they were ignorant, and the gentleman who had had charge of it was absent; so I had no means of knowing. From the facts before me, I looked upon it as a case of chronic disease of the large intestine. Treatment: Stimulants and anodynes, with milk toddy, &c. On

the 21st, ordered a small dose of *ol. ricini*, together with the anodyne. On 22d, was called in great haste to see her; case represented as being much worse. The oil had acted partially, and the rectum was nearly occluded by some substance. Upon introducing the finger into the rectum, I detected a piece of what I thought to be carious bone. This was supposed to be the coccyx of the woman in a necrosed condition, and was removed with some difficulty. Further examination detected a mass of bones lodged in the rectum. I introduced the index and middle fingers of the left hand into the rectum and dilated it as much as possible (fortunately, the sphincter and surrounding soft parts yielded allbut as the vagina in labor), and with a delicate pair of long forceps in the right hand, to my utter astonishment I extracted what I recognized as a parietal bone of a foetus; and, continuing the operation, I extracted another parietal, the os frontis, the occiput, the clavicles, femora, &c., until the greater part of the most compact bones of the skeleton were removed. This process was facilitated by injecting water up the rectum.

After this operation, for the first time I learned she thought she had been pregnant the year before, and not giving birth to a child, she supposed she was mistaken.

Upon making inquiries as to her former life, &c., I learned she was about 35 years old; had had five children before, with as little inconvenience as most mothers. In 1863 she thought she was pregnant again. Pregnancy advanced as usual, with nothing to distinguish it from gestation generally. September was her ninth month; during that month she was taken with the usual premonitory symptoms of labor, pains and slight discharge from the vagina, and she thought labor was progressing, though the pains were not severe at any time. This condition lasted several days, and then all symptoms of labor subsided; the abdominal enlargement gradually diminished; health only tolerable; dysenteric symptoms came on about two months before I saw her, which was the 19th April, 1864—about seven months from the time she expected labor to come on.

After the removal of the bones, she recovered rapidly, and by the 28th I discharged her as entirely convalescent.

The piece of bone first removed I thought at first was a portion of the coccyx of the mother, but I may have been mistaken. The bones indicated full development of the foetus, from their size and compactness, and the mother told me she thought she felt the motions of the child as in ordinary pregnancy, during gestation. I carefully preserved the bones, intending to exhibit them and publish the case as soon as circumstances permitted; but my house was visited by the invaders under Sheri-

dan, and they shared the fate of much of our property—thrown away or wantonly destroyed.

The woman now (1876) enjoys good health, menstruated regularly for several years after her recovery, but has not been again pregnant. She did not menstruate from the time of her supposed pregnancy, or during it, until after the removal of the remains of the foetus.

After extracting the bones, I endeavored to examine the rectum to see if there was any opening into any other part, but could not detect one; nor was fecal matter at any time voided through the vagina, indicating communication with the uterus or vagina and rectum.

My opinion is, it was a case of extra-uterine pregnancy; it progressed to maturity, delivery being impossible per *vias naturales*; the foetus died; adhesion took place between the sac which contained it and the bowel; nature made an opening, and the bones were voided per rectum."

Dr. Pollard thought it a case of ulceration of the womb, and, consequently, rupture in parturition, in which opinion Drs. Richards and Moore expressed their concurrence.

This being the regular meeting for the election of officers, all the old officers were re-elected, to-wit: Dr. Ro. G. Hill, President; Dr. T. Braxton, Vice President; Dr. G. W. Pollard, Secretary; and Dr. J. A. Littlepage, Treasurer.

"*Intermittent and Remittent Fevers*" was chosen as the subject for discussion at the next meeting, which will be held on the first Thursday in August; and Dr. B. Richards was appointed to open the debate.

AMERICAN MEDICAL ASSOCIATION.

PROCEEDINGS.*

First Day.—The 27th annual session of the American Medical Association convened in Horticultural Hall in Philadelphia, Pa., at 12 M., Tuesday, June 6th, 1876. About 350 members and delegates from all sections of the country were present, though up to the time of adjournment about 730 members were enrolled as in attendance during the session.

The President-elect, Dr. J. Marion Sims, of New York, was formally introduced by the retiring President, Dr. W. K. Bowling. Vice Presidents, Drs. Sam'l Lilly, of Lambertville, N. J., Ninian Pinckney, U. S. N., and S. D. Seelye, Montgomery,

*Compiled from the *Philadelphia Inquirer*, *Public Ledger*, *Daily Press* and *Evening Bulletin*; also from reports in *Medical and Surgical Reporter*, *Medical Record*, *Boston Medical and Surgical Journal*.

Ala., and the Secretaries, Drs. W. B. Atkinson and R. J. Dun-
glison, were in their places.

Prayer was offered by Rev. E. K. Beadle, D. D., of the Pres-
byterian Church.

Dr. Wm. Pepper, Chairman of the local Committee of Ar-
rangements, delivered the address of welcome. Among other
things, he stated that a remarkably low rate of mortality has
accompanied the rapid increase in the population of Philadel-
phia, which is attributed largely to the happy influence of the
building associations, which have prevented overcrowding, by
separating the population into families. Entertainments, the
speaker announced, would be confined to the evenings, which
would enable the members present to visit the Centennial
grounds. In concluding, he nominated as members by invita-
tion the following visitors: Surgeon-General Wm. Roth, of 12th
Corps (Royal-Saxon) German Army and Staff, viz.: Assistant
Surgeon Hans Heyman, 12th Corps (Royal-Saxon) German
Army, and Max Brille, of Dresden, Germany; Drs. Waywood-
zoff, of St. Petersburg, of the Russian Commission; D. Saffrey,
representative of the Paris press at the Exposition, and Surgeon-
General J. K. Barnes, U. S. Army. These gentlemen were in-
vited to seats on the platform.

Calling of the roll was, on motion, omitted. A letter from
Dr. W. O. Baldwin, Montgomery, Ala., a former President of
the Association, was read, regretting absence.

Vice President, Dr. Lilly, was called to the chair, and Dr.
Sims proceeded to deliver the annual address of the President.
In his introductory remarks, it was stated that the first medical
school was established in Philadelphia 100 years ago, and that
this Association was organized 29 years ago in Philadelphia, and
its first meeting held in Baltimore in 1848. The speaker then
paid a tribute to the memory of the late Vice President, Dr. J.
B. Jackson, of Kentucky, after which, he entered upon the dis-
cussion of the various forms of education in this country, and
the professional code of ethics. Vice President, Dr. W. O.
Baldwin, of Ala., in his inaugural address, has ably set forth
the defects in the prevailing methods of education, and proposed
as a remedy the establishment of a great national University,
under the auspices of the government at Washington. While
he favored a grand, national medical University, he was yet
forced to let the subject rest for a while longer for want of con-
gressional sympathy with the movement. Chicago and Boston
are taking the lead in medical reform by inaugurating the true
scholastic method of classes and terms of study in their medical
schools. The Harvard method, with a salaried faculty, wholly

independent of fees from students, is the only plan by which we can ever hope for a medical degree of any real value. No rich man could do more for his country, for science, for education, for humanity, than to liberally endow one of our already established medical schools, and thereby place it upon an independent footing. If \$500,000 or \$600,000 were given to the Medical Department of the University of New York, or to either of the schools of New York or Philadelphia, properly invested, there would be an annual income sufficient to endow the professorships in the school. This would make the professors independent, and they would not be compelled to graduate young men merely for the sake of the numbers graduated, irrespective of qualification. The University of Virginia is perhaps the best training school in the country, but, unfortunately, its want of hospital advantages cripples its practical teaching.

As to the code of ethics, he was of the opinion that it is not up to the standard of professional requirements, while, at the same time, it hampers the profession at large in many ways, which should be perfectly free. The present code of ethics is violated every day, not only by the rank and file, but by those high in authority—men who were considered leaders, advanced thinkers and workers. How many of those present prescribe chlorodyne, tolu anodyne, McMunn's elixir of opium, etc? Yet, these were secret remedies, and their prescription is a flagrant violation of the code. But they seem to condone the act because usage and interest justified it. Again, in regard to patents, Dr. Sims asked why may not physicians who invent instruments take out patent rights? Their failure to do so, or, rather, the law of the code on this subject, simply enriches the instrument-maker, at the expense of time and labor on the part of the inventor. The physician is simply compelled to *give* his invention. Does the profession at large, or does the public, derive any benefit by this robbery of the inventor? This is the first time that the validity, the constitutionality of the code has been questioned; but it is not questioned that a committee should be appointed to investigate it. Let the code stand as it is; honorable men do not need it to influence their actions; dishonorable men will not regard it or any other. Let it be the object of this Association to educate its students up to that higher code, that unwritten law which is the universal standard of England.

The subject of State Medicine was next touched upon as of the greatest importance. The address of Dr. Bowditch, foreshadowing the practicability of inaugurating a movement looking to the establishment of a National Health Bureau, commended itself to the attention of members, so far as the initiatory formation of State Boards of Health was concerned.

In regard to Syphilis, Dr. Sims forcibly urged the need of legislation to prevent and blot it out; but there should be no such thing as legalizing prostitution, as is done in France. He thought even the partial license law of England wrong. While speaking of this subject, the speaker paid a handsome tribute to Prof. Gross, whose boldness and outspokenness in advocating such legalization at the last annual session were deserving of all honor. But we want such legislation as will enable the physician to deal with syphilis as with cholera, or small-pox. Some startling statistics regarding prostitution on the Pacific coast were given. A system of sanitary inspection and control is wanted to prevent the importation of the disease, as well as to prevent its spread in this country.

"This being the centennial of our national existence," continued the speaker, "let us make the resolve from this time on to show no sectional feeling. (Great applause.) Let us show the world that the American Medical Association is not to be made the gladiatorial arena between professional athletes."

On motion of Dr. W. Brodie, of Detroit, Mich., thanks were returned to Dr. Sims for the very interesting address, and a copy was requested for publication.

After the announcement of the special order for to-morrow, the meeting adjourned until 9 $\frac{1}{2}$ A. M. to-morrow.

The Section on Obstetrics discussed the treatment of the pædicle in ovariectomy.

In the Section on the Practice of Medicine, Dr. Frank Davis, of Chicago, read a paper on the use of malt in phthisis. Drs. Squibb, Toner, Palmer and others participated in the ensuing discussion.

In the Section on Surgery, Dr. L. A. Sayre, of New York, read a paper on the treatment of Pott's disease by plaster dressing, which occasioned an interesting discussion.

A grand promenade concert and supper was largely attended and enjoyed at night in Horticultural Hall.

Second Day.—After the appointment of a Committee on Nominations, to consist of one member from each State represented, the Judicial Council brought in a report which decided that the delegates from the Arkansas State Medical Society, recently organized, were entitled to seats as the proper representatives of that State in this Association.

Dr. R. C. Kedzie, of Lansing, Michigan, read a paper on *Natural Purifiers*. Air and water, he said, hold the first place among such purifiers, for after all, there is but one purifier—oxygen. Of these two, it is more important that, as sanitarians, our attention should be directed to water. The paper was es-

pecially valuable as pointing out the shortcomings of founders of cities in not properly protecting from contamination the water courses which pass around and through their borders, from which the city water supplies are chiefly drawn. Water may contain two classes of poisons, viz.: (1) fixed poisons, such as arsenic, strychnia, etc.; and (2) germinal poisons. Dilution does not proportionately diminish the danger from this class of poisons. In view of these facts, and also of the uses made by citizens of such water courses, the speaker introduced the following resolutions, which were adopted:

Resolved, That it is the first duty of States, first in importance, and first in the order of time, to make a sanitary survey of the water supply to preserve it against unnecessary contamination.

Resolved, That no municipality should introduce a water system without at the same time providing a corresponding and co-extensive sewerage system.

On motion of Dr. Atkinson, Drs. Wilhelm Hiorth and H. G. Holst, medical directors, Christiana, Norway, were admitted to seats in the convention.

Dr. A. Garcelon, of Lewiston, Me., presented a report on the *Centennial History of American Surgery*. American surgery, he said, is but the offspring of the European. It is only a little more than a century since surgery and the tonsorial art were practised by the same individual. A hundred years ago, only two colleges had been established in this country, and the whole number of graduates at that time was not over fifty. At that time, however, this country was so sparsely settled (only two cities having then a population of over 20,000 inhabitants) that but few men of high scientific attainments could find employment for their skill. Under such circumstances, ignorance and empiricism prevailed. Even a half century later, we had made but little progress. However, the establishment of medical schools and hospitals, and the publication of medical journals followed the commencement of the present century, and the war of 1812 imparted to them an additional stimulus. Since 1800, the number of these institutions has increased with great rapidity, so that the schools now number not less than 100, besides a large number of preparatory schools. Many of the graduates of these institutions rank as the peers of those of any age or country; and as practical operative surgeons, they have no known superiors. This Association has accomplished much good, but there is vastly more to be accomplished. It must see that none but thoroughly qualified physicians are admitted to practice. In England, France and Germany, law requires due

preparation, and admits none into the profession who have not passed rigid examinations. The paper was referred to the Publishing Committee.

The report of the Treasurer, Dr. Casper Wister, of Philadelphia, showed a balance on hand June 1st, 1876, of \$4,577.07.

The report of the Committee on Publications states that 950 copies of the last annual Transactions were published, at an aggregate expense of \$2,000, and that 901 copies have been distributed to members, etc.

The Librarian, Dr. Wm. Lee, Washington, D. C., reported that 124 distinct titles had been added to the library during the year. The total library now consists of 630 distinct titles, which comprehend 1514 volumes, including pamphlets.

The Committee on Prize Essays reported that the essay by Dr. H. Culbertson, of Zanesville, Ohio, on *Resection of Joints*, was deemed worthy the prize offered by the Association. On motion, the essay was referred to the Committee on Publications.

After the adoption of resolutions introduced by Dr. Edward Seguin, of New York, instructing the delegates of the Association to the International Medical Congress to advocate, as hitherto, the uniformity of means of observation, Drs. H. J. Bowditch, of Boston, and Edward Seguin, of New York, were appointed delegates to the said International Medical Congress, to convene in Philadelphia, September 5, 1876.

Dr. H. T. Rennolds, of Maryland, moved that 5,000 copies of that portion of the President's address relating to syphilis be printed for general distribution.

Dr. Quimby, of New Jersey, as an accepted amendment, moved that 10,000 copies be sent to the Secretaries of local societies to be distributed among the clergy and other educated members of the community.

As a further amendment, which was finally adopted by the Association, it was ordered that the Permanent Secretary send copies to members of the National Association, with request that they distribute them.

Dr. E. C. Howard, of New York, one of the delegates at the International Medical Congress at Brussels, held last September, read his report, which was referred to the Committee on Publications.

Dr. Halles, of Albany, N. Y., presented a memoir of Dr. Jas. H. Armsby, of Albany, N. Y., which, after being read, was accepted.

On motion of Dr. Thompson, the Committee on Publications were instructed to publish the Transaction in several volumes if necessary.

A communication from Messrs. W. H. Pile, of Philadelphia, Louis Dohme, of Baltimore, and Chas. L. Eberle, of Philadelphia, representatives of the American Pharmaceutical Association, was read and referred to a Committee composed of Drs. Stillé, Biddle and Rogers. The communication suggests to the American Medical Association the advantage which would result from selecting a list of dangerously active medical preparations, noting their maximum doses, and the maximum quantity which may be administered safely during 24 hours, and which quantity ought not to be exceeded without the addition of some caution mark, previously agreed upon, by the physician. "In case a prescription is presented to be compounded with articles ordered in quantities exceeding these maximum doses thus laid down, and without the caution marks annexed, the pharmacist should return the prescription to the physician in order that the requisite caution mark or marks should be added." The communication calls attention to the precedent, that "in some European countries a list, as here suggested, is framed by legal enactment, and published by authority and appended to the pharmacopœia, becoming thus obligatory on every pharmacist."

On presentation by Dr. S. D. Gross, it was "*Resolved*, That those medical gentlemen present at this meeting, who were permanent members, but are now excluded from membership simply on account of being in arrears, be re-instated to membership, if full payment be made at once of all dues."

On presentation by the Librarian, it was "*Resolved*, That the Librarian be furnished yearly with 100 copies of the volume of Transactions for exchange with foreign medical and scientific societies and prominent foreign medical journals."

Another resolution specifying special exchanges was also adopted.

A memorial of Dr. Logan, of California, was read and ordered to be entered on the minutes.

Adjourned until 9½ A. M. to-morrow.

In the Section on Medical Jurisprudence, Dr. J. J. Woodward, U. S. A., read a paper on the Differential Diagnosis of Blood Corpuscles, which was illustrated by superb micro-photographs of the blood discs of man and various animals. While describing his method of measuring corpuscles, he pointed out the inaccuracies which are common in measurements made by experts. He expressed the hope that hereafter all experts in courts of justice would be called upon to corroborate their evidence by photographs of the blood corpuscles they had examined in a given case of blood stains. There has been great extravagance in experts, who claim to distinguish corpuscles of

blood of different animals, because in every drop of blood there are corpuscles of different sizes, and because corpuscles differ in size in blood taken from different portions of the same animal. This difference makes the corpuscles of man and dog overlap each other—*i. e.*, the smallest discs in man are larger than the smallest in the dog, and the largest in the dog are larger than the largest in man. He then gave the maximum, mean and minimum measurements, in millionths, of corpuscles of man, dog and guinea-pig, showing how, in the varying sizes of each, they resembled, and could not certainly be distinguished from each other. He showed photographs of human blood, in which corpuscles measured .000,019 more than discs of the dog; another, in which dog's corpuscles were .000,013 more than human blood corpuscles. He was very severe on attempts to distinguish corpuscles of sheep, cat and ox from human corpuscles, and said that nothing could make him swear away human life by any difference he might detect in the size of corpuscles taken from *dried* blood stains from the average size of man's corpuscles. The effect of drying and of reagents upon the size of blood corpuscles changed them to such an extent that he could not, or would not, swear to the kind of corpuscles, if it involved the life of a human being. Dr. W. conceded that if a stain had corpuscles larger than .000,300 or .000,290 inch in diameter, he would not then swear that they were either those of a dog or of man. He closed by reiterating that under no circumstances would he swear that blood stains were human if life were involved, and he thought the time had come when authority should put forth its hand, and say to experts in blood stains, Halt!

Other remarks were made by Dr. J. G. Richardson, of Philadelphia.

The Section of Obstetrics was taken up mostly with a new galvano-caustic battery of wonderful power and very convenient size, manufactured by W. G. Creamer, of Brooklyn.

In the Section on State Medicine, a bill proposing a National Board of Health, to be sent to Congress, was read, framed by Dr. H. B. Baker, of Lansing, Michigan. Dr. May read a paper on the Social Aspects of the Alcohol Question. Dr. F. Staples, of Winona, read a paper on Climatology of Minnesota in relation to Pulmonary Diseases. A resolution was unanimously adopted proposing the erection of State Inebriate Asylums.

In the Section on Practice of Medicine, Materia Medica and Physiology, Dr. Gurdon Buck, of New York, read a paper on the Use of Arsenic in Skin Diseases. His doses were not approved. For instance, he gives liquor potassæ arsenitis in 20-drop doses three times a day to a child three years old. There was also an interesting discussion on whooping cough.

In the Section on Surgery, Dr. Adinell Hewson read a paper on Pirigoff's Amputation. In a warm discussion on the Treatment of Fractures, Dr. L. A. Sayre, of New York, advocated plaster-dressing and non-interference, while the majority preferred other methods. "A hot, noisy altercation took place between Dr. Sayre and Dr. Martin, of Boston Highlands, in relation to the treatment of fracture of the lower end of the radius."

Third Day.—Because of the difficulty of hearing in Horticultural Hall, the Association, soon after convening, adjourned to Kiralfy's Alhambra Theatre.

A resolution adopted yesterday, considering all persons whose names were on the Secretary's roll as members of the Association, was reconsidered, and the Secretary was requested to call the roll. The Secretary whereupon proceeded to call the roll of more than 730 names, when he was stopped at 10 o'clock because of the special order of the day—the reading of a paper on Obstetrics by Dr. S. C. Busey, of Washington, D. C.

This paper by Dr. Busey was a very carefully-prepared resumé of the results of recent investigations, was illustrated by a series of colored diagrams, and was well received. He alluded to the decided advance made by Dr. Wm. Goodell, of Philadelphia, in the manipulation of the "head-last presentations." In regard to forceps, traction is the proper mode of using them; the pendulum movement should be discarded. He then spoke of the "sericeps," a kind of bag for "head-last" presentations, described apparently independently by a Frenchman and American, although it is probable that the French inventor had never heard of the prior invention by an American. He mentioned the use of perchloride of iron in *post partum* hæmorrhage, but believed that uterine contractions were really the only perfectly safe means of arresting the hæmorrhage. In alluding to the rise of temperature during transfusion, he said the phenomenon has not yet been explained. If there be fever at all, it occurs within three hours after the operation. The thermometric rise may be a neurotic element, as suggested by Dr. Wood, although he was not ready to accept the hypothesis. The largest percentage of success was in cases in which the temperature descended soon after transfusion. The puerperal convalescent is no longer starved, nor forbidden the sun, nor kept weeks in moveless attitudes.

Lesions in the continuity of the inner surface of the womb are now considered foci of puerperal fever. It is not a result of unknown blood changes. According to Duncan, it is absolutely free from epidemic effects like those of scarlet fever. Thrombosis of the lymphatics, as suggested by Virchow, is con-

sidered as having an influence in causing puerperal fever. Physiological or chemical changes in the lymph are the probable causes of its coagulation. Thrombosis in the lymphatics, according to Virchow, however, occurs only in the graver forms of the disease. Septic matter probably enters the lymphatics by means of open spaces in the surface of the womb. Diseased lymphatics have been traced to the broad ligaments.

Bourneville's tables of temperature in puerperal eclampsia, show that no death occurs when it is below 104°F., and no recovery when higher than 106°F. This suggests that treatment should be directed to the moderation of temperature. Venesection is an exploded and discarded treatment. Chloroform narcosis lessens temperature; so does chloral.

In regard to uterine fibroids, he said that a year ago ergot seemed firmly established in their treatment. A large number are now rescued from a class heretofore considered incurable.

On motion of Dr. J. L. Atlee, of Lancaster, the paper was referred to the Publishing Committee, and ordered to be published.

Reading of the roll was resumed after several ineffectual efforts had been made to dispense with it. On reading the name of a delegate from the Michigan State Medical Society, objection was made. Dr. G. E. Frothingham, of Ann Arbor, Mich., presented charges against that Society. At this juncture, a report was brought in by the chairman of the Judicial Committee, Dr. Bennan, recommending that delegates from that Society be received. Adopted with applause.

When the name of Dr. Sarah Hackett Stevenson, of Chicago, was called, Dr. Wm. Brodie moved to refer her name and all kindred names to the Judicial Council. The Secretary stated that she brought credentials from the Illinois State Medical Society, which were conclusive of her right. On motion, Dr. Brodie's motion was tabled. The President then asked if the vote tabling Dr. Brodie's motion was intended to recognize Dr. Stevenson's right to a seat? Loud cries of "Yes," and cheers emphatically answered the question.

On motion of Dr. H. D. Holton, of Brattleboro, Vt., the Secretary was directed at future meetings to print each day the names as enrolled.

A resolution was referred to the Judicial Council, declaring that it would not be derogatory for a medical practitioner to take out a patent for a surgical instrument.

On presentation by Dr. Hunt, of New Jersey, it was *Resolved*, That the Judicial Council consider that portion of the President's address which relates to Ethics, and report next year if alterations are needed.

The trustees for the McDowell Monument Fund, through Dr. Keller, of Louisville, Ky., recommend an increase of one dollar each year in membership dues until the sum of \$10,000 be raised to secure the building of the monument. Tabled. Dr. J. M. Toner, of Washington, D. C., then moved that an appropriation of \$1,000 be made to the McDowell Fund from the Treasury of the Association, which motion was declared to be out of order, except on the first and fourth days of the Association's meeting.

Dr. Henry A. Martin, of Boston, Mass., moved that a committee be appointed by the President to consider the subject of bovine vaccination, instead of the usual arm to arm practice, to report at the next annual meeting. Passed.

Dr. H. W. Jones, of Chicago, Ill., was appointed a delegate to foreign medical Societies.

Adjourned until to-morrow morning.

In the Section on State Medicine, June 8th, a discussion took place on a proposed bill to organize a National Board of Health.

Dr. J. S. Billings, U. S. A., of Washington, D. C., had investigated many similar bills presented for adoption by Congress, and it was his judgment that the Association should not at present meddle with the subject.

Dr. Elisha Harris, of New York, agreed with Dr. Billings, but believed the subject would, sooner or later, be made a national one. The work properly belonged to the States, and it needed such legislation as only a State could provide.

Dr. Billings said that the whole people must be made acquainted with the importance of sanitary measures. It was not for physicians to do this work, but for the Public Health Association. The papers for the Medical Association should relate to the characteristics of disease, and were not intended for the public. Any measure of preventive medicine must rest upon statistics of some kind. Those records must be made by the physicians. This imposes a great amount of labor, and what return will be made for this labor?

Dr. H. J. Bowditch, of Boston, thought it would be indelicate to send to Congress such a bill. He objected to it on another ground; public opinion was not prepared for such legislation. We should first get in the States. If Pennsylvania and New York still refuse to establish boards of health, it would be futile to go to Congress. We would meet with refusal a number of times before success was attained. That was the experience in Massachusetts. He wished, however, that some general statement of the matter could be made to Congress.

Dr. J. M. Toner, of Washington, had little hope that such a

bill would be adopted, but it would acquaint Congress with the fact that this Association is looking in that direction. He thought it should be presented to Congress, and thus the country would be advised and educated as to the movement. It was the duty of the profession to indicate and to lead.

Dr. Harris said that a contour map of the State of New York was now being made, which would be made the basis of sanitary reforms. Such work could properly be done by any county or State.

Dr. Hunt, of Trenton, N. J., said a good deal of preliminary work had to precede legislation. It was not entirely necessary to complete the work in a State before going to Congress. It was questionable whether the presentation of a bill would be the best way to reach the ear of the public. We might make a point by showing that the usual mode of taking the census was defective; another point might be made with the Bureau of Education. Thus, many of the outposts could be carried.

Dr. A. N. Bell, of New York, said there was danger of pernicious legislation on this subject. We could certainly do nothing useful with the present Congress. He thought a committee should be appointed by the Association to take such subjects into consideration, with power to act. He believed this Section was organized with special reference to this subject.

Dr. Billings' resolution was adopted.

Dr. Bowditch offered a resolution that the American Medical Association earnestly urge upon Congress the devising of some plan whereby the National Government can secure such information bearing upon the health of the nation as shall be of service in its promotion. Adopted.

The Section on Obstetrics discussed the treatment of puerperal hæmorrhage.

The Section on Practice of Medicine, etc., discussed Dr. Reger's paper on Cholera.

In the Section on Surgery, Dr. L. A. Sayre suspended a child by the head and straps passed under the axillæ, and applied the plaster dressing for Pott's disease. Before the application, the child could not stand upright. Subsequently, he walked erect with ease. Suspension of the body established an extension which separated the vertebral bodies. There was also a discussion on the surgical treatment of uterine fibroids.

Fourth Day.—Charges were preferred against the Illinois State Medical Society by Dr. E. Richardson, of Louisville, Ky., which were referred to the Judicial Committee.

On presentation by Dr. J. M. Toner, it was

Resolved, That the members of the regular profession who in

any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are deemed thereby to violate the spirit of the ethics of the American Medical Association.

Dr. Atkinson, Secretary, reported that in obedience to a resolution adopted at the last meeting, he had addressed inquiries to the authorities of different States, in reply to which he is informed that boards of health exist in Alabama, California, Georgia, Massachusetts, Michigan, Minnesota, Virginia and Wisconsin. From Delaware, Indiana, Iowa, Nebraska, New Jersey, New York, South Carolina, Texas and Vermont the results of his inquiries were almost negative.

Dr. H. C. Wood, of Philadelphia, offered the following resolution, which was adopted :

Resolved, That a committee of three be appointed by the Chair to obtain from Congress an appropriation for the publication of a subject catalogue of the National Library, and that the State Societies are requested to take such action as may be deemed fit to further said object.

A note of regret from Dr. P. F. Eve, of Nashville, Tenn., was read and entered.

The Committee on Nominations presented the following report, which was unanimously adopted :

For President: Dr. Henry I. Bowditch, Mass. Vice Presidents: Drs. N. J. Pittman, North Carolina; Franklin Staples, Minnesota; Joseph R. Smith, U. S. A.; Samuel C. Busey, Washington. Treasurer: Dr. Caspar Wistar, Philadelphia. Librarian: Dr. Wm. Lee, District of Columbia. Committee on Library: Dr. Johnson Eliot, District of Columbia. Assistant Secretary: Dr. J. H. Hollister, Illinois. Committee of Arrangements: Drs. N. S. Davis, J. W. Frear, H. A. Johnson, T. D. Fitch, H. W. Jones, Jos. P. Ross, Leslie Curtis. Committee on Publication: Drs. W. B. Atkinson, T. M. Drysdall, Albert Fricke, Samuel D. Gross, Caspar Wistar, Richard J. Dunglison, and Williams.

Next place of meeting, Chicago; time, first Tuesday of June, 1877.

Judicial Council: Drs. . S. Davis, Chicago, Ill.; E. L. Howard, Maryland; W. O. Baldwin, Alabama; H. W. Dean, New York; A. N. Tally, South Carolina; J. P. Logan, Georgia; D. M. Stormont, Kansas, in place of the seven whose terms expire at this meeting.

Committee on Prize Essays: Drs. N. S. Davis, Edmund Andrew, E. Ingall, Moses Gunn, E. P. Cook.

Special Committee on the Influence of Climate on Pulmonary Diseases in Florida : Dr. E. T. Sabal, continued..

Delegates to the International Medical Congress to be held in Philadelphia in September next : Drs. H. I. Bowditch, Massachusetts ; E. Seguin, New York ; Thos. L. Madden, Tenn. ; J. S. Wellford, Virginia ; A. Dunlap, Ohio ; John T. Hedgen, Missouri ; Joseph Carson, Pennsylvania ; John C. Dalton, New York ; W. O. Baldwin, Alabama ; D. W. Yandell, Kentucky ; N. S. Davis, Illinois ; Austin Flint, Sr., New York ; T. G. Richardson, Louisiana ; W. F. Westmoreland, Georgia ; A. M. Pollock, Pennsylvania ; Frank Hastings Hamilton, New York ; B. M. Bemiss, Louisiana ; L. A. Dugas, Georgia ; Francis Bacon, Connecticut ; Hunter McGuire, Virginia ; A. J. Shurtleff, California ; E. M. Moore, New York ; O. W. Holmes, Massachusetts ; G. A. Otis, U. S. A. ; T. E. Gunnell, U. S. A. ; E. C. Harwood, New York.

On motion of Dr. Atlee, of Lancaster, the salary of Dr. Atkinson, permanent secretary, was raised to \$1,000 for the present year.

Dr. Bell, of Iowa, offered the following resolution, which was adopted :

Resolved, That there be appointed a committee of three members of this Association in each of the States where there has been no action taken for the establishment of Boards of Health, to urge upon those States the necessity of the establishment of such Boards.

Drs. Atlee and Toner were appointed a committee to conduct the new President, Dr. Bowditch, to the stand, where he was greeted with great applause.

A communication was read from the Centennial Commissioners from Victoria, asking information as to the number of medical colleges in good standing in this country. A motion was made to refer it to the Judicial Council.

Dr. Busey said the Judicial Council did not have the right to determine the standing of any college.

Dr. Frothingham, of Michigan, said the quarrels about the colleges were a disgrace to the profession.

On motion of Dr. Toner, the whole matter was laid on the table.

Dr. Squibb, of Brooklyn, introduced the following resolutions :

Whereas, The usual time for a decennial revision of the U. S. Pharmacopœia is drawing near ; and

Whereas, The plan of revision and publication in force in 1820 may not now be the best that could be devised ; therefore,

Resolved, That the American Medical Association take the whole subject of the National Pharmacopœia into consideration for a review of its management, and, for the present time, with especial reference to the following questions :

First. Whether the present plan of decennial revision and publication be practically sufficient for the needs of the materia medica and pharmacy of the present time, and, if not sufficient, whether a plan could be devised which might offer probable advantages enough to justify an attempt to disturb the present one?

Second. Whether this Association be the proper custodian in this country of the interests involved in the National Pharmacopœia, and if it be the proper source of the national codex, whom can we invite to co-operate with it in the work?

Third. If it be a work for this Association, in what way can its details be wisely undertaken with any prospect of material improvement upon the present plan?

Resolved, That in order to facilitate mature and general deliberation upon so important a subject, the final discussion of these resolutions be laid over for at least one year, and the matter be recommended to the President of the Association for consideration in his annual address for the meeting of 1877.

He proposed generally that a Council should be formed composed of eight members, two to be appointed by this Association, two by the Pharmaceutical Association, two by the Surgeon General U. S. A., and two by the Surgeon General U. S. N., who should take charge of the revision in 1880.

The resolutions were adopted, and the subject was made the order of business for the morning of the second day of the next session, at which time Dr. Squibb is to present the subject in detail.

The President, Dr. Sims, in stating that the Association was now ready to adjourn *sine die*, said that the work transacted during the past three days would exhibit to science a record of progress greater than ever before. At this meeting many familiar faces have been missed. Francis Gurney Smith, who has served them long and faithfully, is abroad to recuperate his shattered health. The absence of so many of our Southern brethren is not due to any lack of interest in the proceedings. Thank God, the day of strife is passed, and passed forever. There was bitterness and hate, now there is kindness and affection. What higher proof can there be of this than the election of a man educated at the South? At this time, Massachusetts and South Carolina can join hands. Dr. Sims, who was formerly of South Carolina, then clasped the hand of the newly-

elected President, Dr. Bowditch, the act being received with shouts of applause.

Dr. Bowditch then addressed the Association, and said the place had sought him and not he the place. He deemed it a special honor to occupy the position in this Centennial year. In conclusion, he returned his sincere thanks.

Dr. Grissom, of North Carolina, thanked Dr. Sims for the language used.

Adjourned *sine die*.

Book Notices, &c.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M. D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania; Physician to the Dispensary for Skin Diseases, Philadelphia, etc. Part I. Philadelphia: J. B. Lippincott & Co., 1876. Royal quarto. Price, \$2.50 per Part. Issued quarterly. (For sale by West, Johnston & Co., Richmond.)

We cannot too highly commend the author and publishers because of this undertaking; nor is it fulsome compliment to say of them that they have succeeded admirably in the accomplishment of their design. When clinical material for the study or teaching of skin diseases is wanting, there can be no substitute for a faithfully drawn and properly colored picture of the peculiar eruption or disfiguration to be explained. No amount of word-painting, however graphic the verbal descriptions may be, can convey a perfectly correct idea of the appearance of a skin disease.

"The Atlas will consist of a series of original, nearly life size chromo-lithographic illustrations painted from life, representing the most important diseases of the United States." Each quarterly issued Part will contain four such plates, with explanatory text descriptive of the case, and notes concerning the diagnosis and treatment of the disease under consideration. "The work will be distinguished for its practical character. *** It will probably be completed within eight, and certainly will not exceed ten parts."

Part I, which is before us, contains plates of characteristic cases of Eczema (erythematosum), Psoriasis, Lupus Erythematosus, and Syphiloderma (pustulosum).

The publishers announce as in press, for early publication, a Treatise on "Diseases of the Skin" by the same author.

The Medical and Surgical History of the War of the Rebellion. Part II. Volume II. SURGICAL HISTORY. Prepared under the direction of Joseph K. Barnes, Surgeon General United States Army, by GEORGE A. OTIS, Asst. Surg. U. S. A. First Issue. Washington: Government Printing Office, 1876. Royal octavo. Pp. 1025-xx. (From the Surgeon General's Office).

The publication and distribution of Part I of this work some five years ago has already given the profession an idea as to what to expect. This, too, is fortunate for us, since we could scarcely refer to the many excellences of the work were we to devote an entire number of the *Monthly* to the task.

Much complaint was at one time made by some to the title. While there are many in the North who honestly looked upon the "unpleasantness" as a *Rebellion*, and some in the South who cheerfully adopt the name as applicable to the condition of affairs some years ago, still the term is unfortunate at this late period, when the aim of each party is ostensibly to conciliate the other, and return to a true peace. It is especially unfortunate that the Medical Department of the Government should have retained the name. It is not our province, in the medical field, to argue the question; but there are enough terms in common use to specify the war between the States as distinct from other wars which have been waged, which could by no possibility have kept open the wounds of even the most sensitive, and certainly the *Medical Department* should have preferred another term to the one adopted.

We cannot do more than to state in general terms the contents of this volume. The work opens with chapter VI, which is devoted to a consideration of *Injuries of the Abdomen*, which is divided into three sections, treating respectively of Contusions and Wounds of the Abdominal Parietes, Visceral Injuries without External Wounds, and Penetrating Wounds of the Abdomen. In the latter section, on page 135, while reporting a case of wounds of the liver, with complications of "extraordinary extent and gravity," we find a foot note by the Editor calling attention to the fact that "this case escaped my memory while compiling the account of traumatic pneumocele on page 514 of the *First Surgical Volume*. This [case], if added to the series there collected, would constitute an eighth example of hernia of the lung observed during the war."

Chapter VII takes up *Injuries of the Pelvis*, which in like manner is divided into sections on Shot Fractures of the Pelvic Bones and Injuries of the Pelvic Ligaments, Injuries of the

parts contained in the Pelvis, and Injuries of the Genital Organs. In this chapter, under the head of Vesical Calculi formed about Projectiles, we find it stated that "American experience has added 13 cases of cystotomy for the removal of projectiles, or of concretions formed about them, and 3 European instances may be added to the collection by Mr. Dixon, making 32 recorded examples of this group." In the Nov. (1875) No. of the *Monthly*, page 545-7, will be found another case, reported by Dr. Hunter McGuire, of Richmond, which will make 33 "recorded examples of this group." It is somewhat remarkable that three of the 33 cases should have occurred in the practice of one surgeon, Dr. McGuire.

Chapter VIII takes up *Flesh Wounds of the Back*. Chapter IX *Wounds and Injuries of the Upper Extremities*, which concludes this Part II.

We cannot venture to speak more in detail. On every page there is something of instructive interest. The volume is beautifully illustrated throughout by excellent plates drawn from nature or photographs. The Editor has done his work with remarkably patient fidelity. The table of *Corrigenda*, it is true, is unfortunately too long, but only those who have to deal with manuscripts and proof-sheets can appreciate the difficulties in the way of getting perfect prints.

In the Editor's *Memorandum*, we find it stated that in June, 1875, an additional appropriation was made by Congress for a second edition of the six volumes of the entire work—three medical and three surgical. The *Third Surgical Volume* will begin with Injuries of the Lower Extremities, which will be followed by a chapter on Fractures and Luxations from other causes than gunshot injuries, and a chapter on Burns, Scalds and Frost-bites. A chapter will follow on shot wounds in general, with complications, as pyæmia, etc. "Generalities on amputations, excisions and ligations will also be presented." Chapters on the Use of Anæsthetics, *Materia Chirurgica*, etc., with a "Copious Analytical Index of the three surgical Parts, will conclude the volume."

We have space to mention only the following :

Normal Standard of Women for Propagation. By Nathan Allen, M. D., LL. D., Lowell, Mass., (Reprint.)

Perinephritic Abscess in Children, with Report of Nine Cases. By V. P. Gibney, A. M., M. D., New York, (Reprint.)

Wire Ligature in Treatment of Ununited Fractures, and in Resection of Bones. By Wm. A. Byrd, M. D., Quincy, Ill., (Reprint.)

Stricture, the Initial Cause of Gleet. By F. N. Otis, M. D., New York, N. Y., (Reprint.)

Extract from Ninth Annual Report of State Board of Charities, New York, relating to Hospitals for Sick and Insane. By Commissioners Anderson and Devereux. To which is appended a *Report relating to the Management of Insane in Great Britain.* By H. B. Wilbur, M. D., Albany, N. Y., 1876.

Review of Prof. T. Gaillard Thomas' Remarks on Chronic Dysentery. By J. B. Mallory, M. D., Memphis, Tenn., 1876.

Treatment of Typhoid Fever. By Edward Warren, M. D., Paris, France, (Reprint.)

Editorial.

DR. SIMS ON THE CODE OF ETHICS.

Our readers of the Proceedings of the American Medical Association in this issue of the *Monthly* will be impressed by the remarks of the late President of the Association concerning the "Code of Ethics." We are glad that such views have emanated from so distinguished a source, for they will thereby attract the more attention, and will more likely lead to a long-needed revolution in professional opinion. This is high ground for us to take; hence we are entitled to some remarks on the subject.

There are many in the profession, it would seem, who would rather establish a reputation for a blind obedience to the "code" than for learning in medicine and science generally. When an applicant for membership comes before a medical society, the question regarding him is not so much as to his moral standing, his gentlemanly deportment in society, his scientific attainments, as it is, is he *ethical* in his walk and conversation? The danger of this tendency of our day is too obvious to need remark—it must inevitably, sooner or later, lead to the substitution of plated ware for pure metal.

The "code" is responsible for this. In proof, we refer the curious to Section IX of the By-Laws of the National Association, which excludes from representation any society or institution that does not adopt the "code of ethics, or that has intentionally violated or disregarded *any article or clause of the same.*"

(Italics ours.) It makes no difference how trivial the offence, or how honestly parties in different communities may vary in opinion as to the propriety or even right of the injunction, the effect is still the same—professional ostracism.

Thus it appears, also, from this provision—this arbitrary though inexorable law, which is not founded on justice or common sense, and in support of which no argument, in fact or by analogy, can be brought—that the *chief* purpose of this grand, national body of *savants*, is *not* to stimulate medical research and scientific study; it is *not* to put necessary furniture and needed repairs in the house—it is simply to paint the outside—to fix short-sighted, arbitrary laws which must hamper progress. Yet, who that attends the annual meetings of the Association has thought of this feature, or has an idea that the principal object of the organization is ethical rather than scientific? What medical man of culture, refinement or delicacy of feeling, or professional standing, would willingly give himself up to such wrangles as must sometimes occur under so short-sighted a rule? Did the representative medical men of Texas, of California, of Maine attend the late session in Philadelphia with the uppermost desire to enter into ethical, or scientific discussions? We cannot suppose that any physician attends these meetings from so small a motive. They go rather, that by the exchange of professional experiences, by the reports of cases, by the discussions of worthier subjects, they may thus gain some new truth of value to themselves, to science, and to the suffering creatures to whom, in their daily rounds, they are called upon to minister—that they may return to their homes with a more elevated conception of their duties, and better prepared to meet the higher obligations of their noble calling. Their motive is more commendable—their purpose more exalted.

But we have not the space to follow up this line of thought. Let us turn for a moment to the code itself, and see if its regulations are so exactly correct that they should be received without opposition. In many particulars, it is open to severe criticism—indeed, some of its provisions are opposed to a common sense view of the subjects discussed. Hence we are profoundly amazed that, at the session of the Association in 1874, when the Judicial Committee reported adversely to “any alteration of the

present code of ethics," the report was *unanimously* adopted. Such unanimity, we must believe, resulted rather from a prevailing opinion as to what the code *should be* than from individual knowledge of what it really does contain. It is surprising to find, in almost any community of physicians who have signed the code, how few have ever read it: some, indeed, have never seen it.

A gross injustice is recorded in the very by-law of the Association to which we have already referred. What sensible man would, for a moment, attempt to affirm that all offences in human law are of the same gravity, and should be punished by equally severe chastisement? Who for a moment would entertain the idea of imposing the same heavy penalty of the law upon the violator of some mere police regulation as upon him who murders? But this is just what the by-law referred to requires. Intentional violation of "*any article or clause*" of the code excludes representation in the Association; those thus excluded from the Association are professionally excommunicated; consultations cannot be held with them, though the parties have really been guilty of no offence in itself which we can justly condemn. The law of the Association can go no further than to excommunicate. Such an inexorable, arbitrary provision would be absurdly ridiculous were it not that its legitimate consequences are so severe. There is no close corporation, there is scarcely any sect, that is so bigoted.

But let us look at the unequal working of the law as applied by societies to offending members. Take, for instance, the provisions regarding contracts and specialties. The law condemns the one; it permits the other, but does not allow "specialists publicly to advertise themselves as such." If this latter restriction—even in face of the defence attempted by the Judicial Council in 1874—is not hiding the candle under the bushel, then we do not understand it. But we do not propose just now to discuss the inconsistencies of this law. We wish to remark—what all will concede without controversy—that there are many who favor certain contract practices; furthermore that there are some of the regular profession who, in the belief that they are right, do accept contracts, and others who would do so if offered them. Societies, however, generally execute the law on these offending members,

and either cause them at once to give up such positions, with the extorted plea of penitence, and promise of doing so no more; or else, such members are expelled, and are afterwards allowed no professional courtesies or rights that can be denied. Even some of those who vote for expulsion under such circumstances acknowledge an error in the law; but still they are willing to do violence to their convictions of moral right, and ruin a brother's professional reputation, deprive him of professional relations, lessen his practice, impoverish his family, and make him a beggar in the community,—not because of the violation of any high moral or civil law, not because of professional incompetency, not because any injury is done by accepting the contract—but simply because a purely arbitrary law requires it.

Per contra, there are certain other obligations imposed by the code, about which there can scarcely be two opinions, but which, we fear, are oftener violated than the former. Many, at least, are guilty of such violations—some of this, others of that. For instance, under the head of *Duties of Physicians to their Patients*, § 2 says “the obligation of secrecy extends beyond the period of professional services,” and yet how often is it that one physician does speak to another or to some non-professional friend “of the privacies of personal and domestic life” of his patient—“of the infirmity of disposition or flaw of character observed during professional attendance?” Section 3 says “unnecessary visits [to patients] should be avoided.” Is this law never broken by those in full fellowship? Section 4 provides that “A physician should not be forward to make gloomy prognostications,” and yet is not every one acquainted with some regular physician who is thus “forward?” Section 6 says, “Consultations should be promoted in difficult or protracted cases,” and yet how frequently are they purposely avoided in just such instances? Thus we might call to mind many articles of the code, regarding the reasonableness and propriety of which there can be no doubt, that are daily violated by the “regular” profession. But how exceedingly rare is it that charges are brought against offenders, or if preferred, are they sustained? The law should the more certainly be executed upon these [parties who violate what all will acknowledge are high

moral obligations than upon those who offend against a law of very doubtful propriety. But who ever heard of a doctor being expelled from a Society because of his speaking disparagingly of a patient, or for making unnecessary visits, or who was forward in making gloomy prognostications, or who did not seek consultations—although *all* condemn such practices? There is nothing in the Code that justifies any distinction in the punishment of the party thus offending and of him who takes a contract, about which there is a difference of opinion. And yet the former remains in good fellowship, while the latter must fall. We do not feel it incumbent on us to prefer charges against any one for breach of the code in the particulars glanced at in these remarks; but we do say let the ‘strict constructionists’ of the law deal *fairly*.

The Pinel Hospital.—For many years Virginia has felt the need of an establishment wherein the unfortunate victims of alcohol and opium could be reclaimed. So general has this want become that the General Assembly, at its last session, passed a law which authorizes relations and friends to have commissions held over these unfortunate citizens, and to compel them to be sent to the Pinel Hospital to be treated and placed in a position to resume their places as useful members of society.

Every guarantee for the protection of these patients has been extended by this act of the General Assembly of Virginia. The Pinel Hospital is at all times subject to the inspection of the regularly authorized State officials; at the same time, every facility is given to the Superintendent to guard the patients from a possibility of continuing their nefarious habits. Every conceivable effort will be made by the officers and directors of this establishment to add to the comfort and happiness of its inmates.

The Institution is situated on the western limits of the city of Richmond, thus allowing the patients easy access to the city, and enabling them to enjoy all the public amusements incident to city life; and at the same time, being in the country, the patients can remain secluded from all publicity. Within the grounds, however, they will have ample opportunity for enjoying themselves, as the hospital will have attached to it the necessary means for the health, comfort and amusement of its inmates.

City Dispensary.—It is proposed to start in this city an enterprise which, we hope, will meet with that encouragement which will develop it into such a charity as will make us justly proud of having such an institution in our midst. We refer to the establishment of a Dispensary for the benefit of the poor.

Competent medical gentlemen have offered to render, without remuneration, the necessary medical services, and have succeeded in associating with them a consulting staff, than whom there are none more honored and respected in the profession. It only remains for the Board of Aldermen and Common Council of the city of Richmond to furnish the small sum of money necessary for the medicines used, and their dispensing by an apothecary, the rent of two small rooms and a few incidental expenses (incurred by getting up, &c.), to make the scheme a success. A failure to establish this Dispensary by those in authority will inevitably re-act prejudicially to the interest of all concerned, and materially interfere with the advancement of our otherwise prosperous city. Why cannot all other Southern cities adopt like measures?

Medical Department of the University of Virginia.—At the recent commencement of this institution, the title of Doctor of Medicine was conferred on the following twenty-one gentlemen: L. A. Cazenove, T. A. Cunningham, A. C. Doggett, J. W. Dillard, P. F. Floyd, M. D. Jeffries, A. Z. Keiner, H. T. Nelson, J. H. Peek, E. W. Saunders, J. A. Tanner, Jr., J. M. Vest, W. S. White and J. F. Winn, of Virginia; J. W. Crenshaw and E. D. Schué, of Kentucky; S. S. Davis and W. F. Lockwood, Jr., of Maryland; H. W. Lee, of North Carolina; T. O. Jones, of West Virginia; and W. R. Du Bose, of Georgia.

The *American Medical Weekly*, of June 17, informs us that the College Convention, which assembled in Philadelphia June 2d and 3d, "has declared against the nine months' term of instruction." If this be so, and if intended in any manner to reflect discreditably upon the Medical Department of the University of Virginia, then we fully endorse the remarks of the *Weekly*, that "the profession will simply laugh to scorn this action on the part of a School Convention against a University whose diploma really stands higher than that of any school represented." It is absurd for any body of medical men in this

country to attempt to cast any discredit upon the holders of University diplomas. It would be a professional blessing if those who criticise the University plan were as well educated as one half of the graduates of this grand old institution, whose Professors are men of learning and honesty beyond suspicion. But we will wait to see the records before we say more.

To Delinquents.—We mail this number to each address on our mailing book, so that delinquents may have another opportunity of arranging their accounts. Those who are not heard from during the month will, therefore, know why future numbers of the *Monthly* are not received. We are exceedingly sorry to give up any one who wishes to continue with us; but we are unable to continue the journal to our friends, scattered, as they are, all over the country, unless they assist in meeting the expenses of publication. We hope that this notice will be appreciated, and give no offence.

Dr. Greenville Dowell, M. D., of Galveston, Texas, is contemplating the publication of a work on yellow fever. Letters addressed to him at La Pierre House, Philadelphia, Pa., will receive prompt attention until September, 1876. His work on Hernia, it is expected, will be ready in a few months. It is sold on subscription, and is highly spoken of by those who have been favored with an examination of the manuscript.

A Few First-Class Medical Book-Keepers Wanting Occupation can find profitable employment by returning borrowed books to their rightful owners. Some *surgical-instrument keepers* would also do well to heed this notice. A few parties may address this office immediately for further particulars. No commissions charged experienced book or instrument *keepers* for finding employment because of this notice.

An International Convention of Archæologists will convene in the "Ohio Building," Philadelphia, 2 P. M., Sept. 4, 1876. "Addresses from prominent anthropologists will be delivered, and it is hoped that a great impetus to investigations in this country will be gained." Notification of intention to attend should be sent at once to Rev. S. D. Peet, Ashtabula, Ohio.

Diplomas of the Medical Department of the University of Michigan, it has been decided, shall be received by the Medical Colleges of New York, and, of course, the other Colleges of the country.

Judging from the articles in journals on the subject, professional opinion is so unanimously in favor of the points taken in our last month's editorial on the Michigan University that we see no need of discussing the subject further, as we had intended doing. The editorial in the last number of the *Richmond and Louisville Medical Journal* reduces the position of the Michigan State Medical Society to a justly ridiculous one.

Boylston Medical Prizes.—The *Boston Medical and Surgical Journal* announces that the \$300-prize was awarded to Dr. W. G. Wylie of New York; subject: Civil Hospital Construction. To Dr. Mary Putnam Jacobi, the \$200-prize; subject: Do Women require Mental and Bodily Rest during Menstruation? "We understand that both of these papers are of an unusually high standard of excellence."

The questions proposed for subjects of essay next year are: (1) Are Epidemics and so-called Contagious Diseases necessarily dependent upon Material Agencies, acting through the Stomach, or otherwise? (2) Athletic Sports, Training, Violent Exercise, etc., as now practised by young men; their Temporary or Permanent Influence on the Health.

The subjects for 1878 are, (1) Antiseptic Treatment; what are its Essential Details? How are they best carried out in Practical Form? (2) Diphtheria; its Causes, Diagnosis and Treatment.

Why may not some of our Southern or Western friends succeed in getting one or the other of these prizes?

The American Gynæcological Society was organized in New York on June 3d, for the promotion of knowledge in all that relates to diseases of women, and obstetrics. Of the 39 members enrolled, we find only two from sections South of Washington City, viz.: Dr. Robert Battey, Rome, Ga., and Henry F. Campbell, Augusta, Ga. The first regular annual meeting is to convene in New York, Sept. 13th. The following are officers

for the year : Dr. Fordyce Barker, New York, President ; Drs. W. L. Atlee and W. H. Byford, Vice Presidents ; Dr. James R. Chadwick, Boston, Secretary ; Dr. Paul F. Mundé, Treasurer ; Drs. J. Marion Sims, Geo. F. Lyman, Wm. Goodell and T. Parvin, Councillors.

Dr. A. N. Bell's Address as President of the Association of American Medical Editors, at its session in Philadelphia June 6, condemns the present method of education in many colleges. From the report given in the *Medical Record*, however, he proposes no remedy.

Our opinion is that we had better let Colleges alone. As money-making corporations, and as institutions that are seeking popularity, they are going to do what suits their own interests. If a fireman discovers that he cannot succeed in saving the house in flames, he does the most sensible thing in his power in directing his attention to saving adjoining buildings. If we cannot reform Colleges, let us as a profession protect ourselves by establishing competent Boards of Medical Examiners in each State—Boards composed of men of learning, and who have no special interest in this or that College.

Officers for the ensuing year are Dr. H. C. Wood, Philadelphia, President ; Dr. W. H. Byford, Chicago, Vice President ; and Dr. Frank Davis, Chicago, Permanent Secretary.

The Indiana State Medical Society, at its meeting in Indianapolis, June 16 and 17, adopted a resolution prohibiting the publication of any paper presented to the Society in a medical journal prior to its publication in the Transactions. The Medical Society of North Carolina, at its session in 1875, made a similar ruling. Such resolutions are opposed to the interests of the Societies named, as journalists, except in rare instances, do not care to *re-publish* lengthy papers. Officers elect of the Indiana Society : Dr. S. S. Boyd, Dublin, President ; Dr. E. D. Laughlin, Orleans, Vice President ; and G. V. Woolen, Indianapolis, Secretary.

Dr. George Cook, aged about 50, the Medical Superintendent of Brigham Hall, Canandaigua, New York, was fatally stabbed in the neck by an insane patient recently admitted, named Benson, June 12th. The patient was not considered dangerous, but took up the idea that Dr. Cook was trying to poison him.

Changes in the Medical College of Virginia.—In place of Dr. I. H. White, resigned, Dr. Geo. W. West has been elected Demonstrator of Anatomy, and Dr. H. M. Taylor to the position made vacant by the promotion of Dr. West. Drs. George Ross and Landon B. Edwards have resigned the Summer Faculty, and their places filled by the admirable selections of Dr. H. H. Levy, Lecturer on Surgery, and M. E. Robinson, Lecturer on Materia Medica.

Salicylic Acid in Acute Rheumatism.—We have not had the space to make extracts from current literature, which strongly recommends salicylic acid as superior to any known agent for the treatment of acute rheumatism. From three- to five-grain doses every three or four hours, greatly reduces the temperature in 24 or 48 hours, relieves the pain, causes the swelling to subside, and in the course of a few days more, restores the patient to his usual health. The doses above are for an adult. Larger doses, it is said, have caused some unpleasant heart symptoms, though this has not been a universal observation.

Michigan State Medical Society.—The following are the officers for the ensuing year: Dr. Abram Sager, Ann Arbor, President; Drs. Foster Pratt, Kalamazoo, Eugene Smith, Detroit; Wm. Parmenter, Vermontville; G. K. Johnson, Grand Rapids. Vice-Presidents: Drs. George E. Ranney, Lansing, and Edward Cox, Battle Creek, Secretaries; Dr. Gordon Chittock, Treasurer.

The North Carolina Medical Society, at its meeting in May, held at Fayetteville, elected Dr. Geo. A. Foote, of Warrenton, President, and Dr. James McKee, Raleigh, Secretary. The session, though not largely attended, was very interesting.

The St. Louis Clinical Record has changed editorial hands—Dr. Wm. B. Hazard now being in charge. This change cannot lessen the excellence which has heretofore characterized the journal.

We return thanks to Messrs. George Stinson & Co., Portland, Maine, for several beautifully-executed steel engravings and a recently published chromo—all of which show a correct appreciation of public taste. They want agents on liberal inducements. See their advertisement, "To the Working Class."

The Public Health Magazine, Dr. George Baynes, Montreal, editor, completed its first volume in June. It is doing good work as a journal of sanitary science.

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Original Communications.

ART. I.—*Warm Water in Uterine Therapeutics.* (An Address delivered before the Eastern North Carolina Medical Association, May, 1876.) By H. OTIS HYATT, M. D., President of the Association, Kinston, N. C.

Gentlemen:—After thanking you for the honor conferred in making me President of this body, when you could have selected a far abler and older man, let me say that, feeling, as I do, my inability to offer any wise suggestions concerning the management and future work of this Society, I shall offer you what I know and what I believe concerning the subject of *Warm Water in Uterine Therapeutics*. The vast majority of the members composing this body, like myself, are country doctors, and if I should fail to instruct, or even entertain, I hope you will consider the difficulties under which we labor, so far as regards the acquirement of knowledge—especially such as is not taught in colleges—and the infrequency of our opportunities for brightening ourselves by social meetings, and the discussion of practical questions.

We are too much occupied in toiling over long roads, and often groping our way at midnight through dense swamps and heavy thickets, to give as much time as we ought, I am afraid, to anything save the practical workings of our calling. It is pre-eminently our business to heal our patients, and that, too, as speedily as possible. The *science* of medicine we can very well leave in the hands of our more favored brethren of the cities, and avail ourselves of the practical results of their investigations.

The use of warm water in uterine therapeutics is of recent date, and, so far as I am aware, has been more prominently brought before the profession by Dr. Emmet than by any one else. Dr. Emmet, in speaking of hot water douches, thus explains their physiological action: "It is generally conceived that the application of heat by this method relaxes the vessels and increases the congestion. This it does at first; but if prolonged, the capillaries are excited to increased action. As they contract, the tonic stimulus extends to the coats of the larger vessels, their calibre becomes lessened, and, with an approach to healthy action, the congestion diminishes. No one applies a hot poultice with a view to increase the congestion of the parts, but, as any old woman would explain it, 'to draw the inflammation out,' *i. e.*, to lessen the congestion by causing contraction of the vessels. That such is the effect of a poultice is shown by the bleached and wrinkled appearance of the tissues after its removal. We can cause contraction of the capillaries by the use of cold, and the effect is even more prompt; but when reaction comes on the tissues will become more congested than before. In brief, the immediate effect of cold is contraction, and with reaction we always have dilatation; heat, on the contrary, causes dilatation at first, and its action is followed by contraction afterwards." This explanation of Dr. Emmet's of the physiological action of warm water is so very true and patent that I presume no one will deny it.

Now, let us exercise that faculty which Herbert Spencer says the human family is most deficient in, "*applicability*," and see what are the pathological conditions in which it is desirable to use a remedy possessing the therapeutic properties of prolonged hot water douches. In running over those diseases of the uterus produced or accompanied by hyperæmia, inflammation or congestion, we find that a great number of the diseases to which this most unfortunate organ is subject come under this head.

First, let us take the "*Areolar Hyperplasia*" of Thomas, or the chronic inflammation of most authors upon gynæcology—although Klob tells us "that diffuse growth of connective tissue constitutes the so-called induration hitherto considered as parenchymatous inflammation of the uterus," while Peaslee prefers to call it congestion, and Scanzoni says "that the nature of the

disease would then be, in an anatomical point of view, an hypertrophy of the cellular tissue." This much we do know, that the condition described as chronic inflammation of the parenchyma of the uterus, chronic congestion, chronic hyperæmia, areolar hyperplasia, and chronic metritis, is one in which the organ is larger than natural; that the organ receives a greater blood supply than nature designed for it, and that it is frequently the result of subinvolution after parturition, of puerperal pelvic inflammation, lacerations of the cervix, displacements and neoplasms. I have once seen it produced by cardiac disease, and a few times as the sequence of excessive sexual indulgence. We know that it is in a condition of improper or imperfect nutrition; but whether there is an increase of the connective tissue or of the muscular fibre, the indications for treatment are one and the same. We must cut off the increased blood supply, and stimulate the organ to healthy nutritive action, before it will return to its normal functions. In ergot, dilatation by means of sponge and sea-tangle tents, the application of tinct. iodine, carbolic and chromic acids to the inside of the uterus; blistering the os by the actual cautery or "cantharidal vesicant," or the frequent abstraction of blood by means of leeches and frequent scarifications, we have means which, combined with the internal administrations of potassii iodidum and proper hygiene, may, and often will, do a great deal toward cutting off the increased blood supply and placing our patient in a better condition. But, in my humble opinion, and according to my observation, there is no remedy which acts so pleasantly, or so efficiently alone, or better when combined with preparations containing ergot, iron, and phosphoric acid, as the prolonged and frequent use of hot water douches. The douches, to be of greatest benefit, should be as hot as the patient can bear—say from 106° to 110°F., and the amount of water used should be at least two gallons, twice daily; if this should fail to cause the vagina to become astringed and corrugated, like the fingers of a washerwoman, I direct my patients always to use such a quantity as will produce this result; for unless the douches are carried to the extent of astringing the vagina as much as an injection of alum or any other astringent would, we do not get the benefit of its full physiological action; and failing in this, we also fail in depleting the uterus and

causing contraction of its muscular fibre. The uterus is not stimulated to healthy nutritive action, and our patient, instead of getting better, remains "about the same." The benefit derived from this treatment is slow, but generally as sure as it is slow—six months not being a long time before the organ returns to its natural size.

Although my own cases have done well, and seemed to be cured, I am far from proposing this treatment as a specific in this, one of the most rebellious of all uterine disorders; and I assure you, gentlemen, if any of you see fit to try this remedy on my recommendation, and should fail to cure your patient after a thorough and persevering trial, I will not be as obstinate as the immortal Sangrado, and say that "you did not use hot water enough."

Of course, during the treatment of this and all other diseases, due regard should be had to the cause of the trouble, and the surroundings of the patient should be attended to. All extra weight of the super-imposed viscera should be removed by means of a proper skirt-supporter; and if the abdominal walls are lax and flabby, it is well for the patient to wear an abdominal supporter—not so much as a support to the walls themselves, but as a means of sustaining the weight of the intestines and keeping them off the uterus, so as to permit the free return of blood to the liver. Complications must be carefully looked for and attended to. Lacerations of the cervix being not only a frequent cause, but comcomitant of this disease, should in every case, if the woman has borne children, be carefully looked for before we proceed to treatment. They are not always easy to detect, and to one who is not in the habit of treating uterine diseases it would be hard to believe that the enlarged and apparently much swollen and abraded cervix (which abrasion so often resists all kinds of treatment), generally seen after bilateral laceration of the cervix, was due to this cause; or that the cervix had sustained any other injury than being enlarged and abraded.

To ascertain whether the cervix is lacerated or not, it is only necessary to place the patient in the lateral prone or knee-elbow position, introduce a Sims' speculum, seize the posterior lip of the cervix with a tenaculum, and draw it forward. The everted mucous membrane, by this manœuvre, is carried back into the

canal of the cervix, and if there is any laceration it will be easily recognized, and should be relieved by an operation before we can expect the womb to return to its natural condition.

Displacements often result in vascular engorgement, and are in themselves a fertile source of the disease under discussion, and must be remedied by proper mechanical means. If there is direct descent of the organ, a Meigs' ring will be of great benefit. If there is retroversion, a well-fitting Hodge's closed-lever pessary, by lifting the fundus, allows of an easier return of blood from the engorged vessels, and will aid as materially in overcoming the hyperplasia. Fungous granulations on the inside of the uterus, which often produce profuse leucorrhœa and bloody discharges; must be scraped off by a curette or destroyed by chromic acid. I prefer chromic acid, because it seems to stimulate the subjacent tissue to healthy nutritive action.

If there is antelexion, the best means I know for placing the uterus in a condition for the free circulation of the blood through the uterine vessels is, by adjusting a Hodge's closed-lever pessary, which will carry the neck up under the promontory of the sacrum and straighten the organ. According to my observation, slight anteversion can hardly be called an abnormal condition, and it is therefore unnecessary to treat it as a complication of chronic metritis; hence, if we can convert an antelexion into an anteversion, we have accomplished a great deal towards cure. After the application of the pessary, there is not only relief to the vesical tenesmus, but the weight of the superimposed viscera, instead of being exerted upon the posterior surface of the fundus, is now directed upon the whole posterior surface of the uterus; and, acting like a weight upon the angle of a bent stick, has a tendency to keep it straight.

The method I usually adopt for the application of hot douches is the following: The patient is brought to the edge of the bed; a piece of oil-cloth is placed under the buttocks to keep the water off the bed clothing, and a good-sized tub placed underneath to catch the water. The patient assumes the lithotomy position; a nurse throws the hot water into the vagina by means of a Davidson syringe—that is, if the patient has the good fortune to have a nurse. But generally I devise a cheap and efficient fountain syringe, by having a small hole bored through the side of an

ordinary water-pail, near the bottom. Through this hole a hollow glass rod or joint of a reed is passed; the reed should be surrounded by a piece of cork or wrapped with a piece of cloth, so as to make it fit tightly. To this reed or glass rod a piece of India rubber tubing, a quarter of an inch in diameter on the inside, and four or five feet long, is attached. To the vaginal end a glass nozzle is attached; or, if these cannot be easily obtained, a goose quill, or anything that is hollow, can be inserted, so as to stiffen the end and allow of its easy introduction into the vagina. When ready for use, the bucket is placed upon a shelf or suspended from a hook in the side of the wall, three or four feet higher than the patient's hips. This contrivance the patient can use very readily herself. It is not only cheap, but has the additional advantage that the pail, being of wood, will keep the water warm longer than a tin vessel or rubber bag. If it is thought desirable, we can attach to the tubing one of the little brass compressors that belong to the fountain syringe; but this is not at all necessary; the stream can be arrested just as well by compressing the tube between the thumb and forefinger.

In *Acute Endometritis*, which, according to my observation (and I am supported also by the authority of Thomas), is a rare disease, we have a condition of things that strongly indicates the use of hot-water douches. The gaping, swollen, and sensitive cervix, the enlargement of the body, and descent of the uterus, to say nothing of the pain, weight, and dragging in the pelvis, pains in the back, groins, and thighs; the dry, hot condition of the vagina, the vesical and rectal tenesmus, call for depletion of the turgid capillaries of the uterus, and opium to relieve pain. In this disease we should avoid passing a probe into the uterine cavity, even for diagnostic purposes. Bi-manual examination generally affords us sufficient signs for us to make out the case. The passage of probes is not only painful, but has a tendency to increase the inflammation; cupping and leeching the uterus affords only temporary relief, and the disease runs its natural course, and in five or six weeks will result in recovery or chronic endometritis.

As soon as the diagnosis is made, treatment should be commenced by putting the patient in the most favorable condition to get well. She should be put to bed, put on opium, and mad

to assume those positions in which there is the least resistance to the return flow of blood from the organ: that is, she should assume the dorsal decubitus, with the hips elevated, or the lateral prone position; either of these positions removes the weight of the intestines from the uterus and allows of the free circulation of blood through the organ. Posture has a great deal to do with the production of uterine diseases, and, it seems to me, it is too often overlooked in their treatment. I have often relieved the sensation of dragging in the pelvis and rectal tenesmus by placing the patient on her back and elevating the hips by means of pillows. Frequently, when I tell patients to sleep or lie in the lateral prone position, they tell me that they have, of their own accord, generally assumed it as the most comfortable one they could find. The diet of the patient should consist of such food as will give the least amount of excrementitious material. I regard quietude of the bowels as an essential element in the treatment of this disease; at the same time, my friend, Dr. O'Hagan, informs me that he has frequently derived benefit from mild saline cathartics. It is true, that cases of endometritis do occur and go on to recovery without the symptoms being severe enough to call for medical aid; but we sometimes meet with cases where the pain is of an excruciating character, and accompanied by considerable febrile reaction.

It has been the habit, until recently, with most practitioners, in the treatment of acute endometritis, to apply leeches to the cervix and perineum, and to use astringent vaginal injections and active purgations. I have resorted to all these, but my results were not as good then as now; besides, the treatment was very annoying to the patient. Generally, I only find it necessary to direct the use of the hot water douches three times daily—one douche relieving all pain and uneasiness for three or four hours, and thereby acting as a most perfect local anæsthetic. I have recently had under my charge a very severe case, in which the attack was cut short by the use of hot water to the extent of three gallons every two hours, and morphine at night to insure quietude and rest.

Chronic Endocervical Metritis, which, of all the diseases of the uterus, is the most frequent, and though it is not at all dangerous to life, may be exceedingly annoying to the patient on

account of the leucorrhœa. It is a frequent accompaniment of displacements, and is often produced, especially in the young married female, whose genital organs are too frequently excited by coition.

Cold also is a frequent cause of this affection, and, I imagine, a want of cleanliness after the menstrual period, especially if the woman is not in the habit of walking or taking exercise in the erect position, so as to allow the decomposed blood to flow from the vagina and not remain in contact with the mouth of the uterus. Women of a strumous diathesis are very liable to it, and this may account for the fact that a great many cases are rebellious to local treatment until put upon cod liver oil and iron tonics.

As I said in the beginning that it was our business to heal our patients as speedily as possible, it is for this reason that I generally use local applications of tinct. iodine, carbolic acid, &c., combined with the hot water douches. I have on a few occasions treated cases with hot water alone, and have effected cures; but these cases have not been sufficient in number for me to assert that they would not have gotten along better if local applications had been made.

On no occasion would I use lunar caustic, or any preparation of nitrate of silver, unless it was very weak, and not then if it were possible to avoid it. It is true, that endocervical metritis, when treated by nitrate of silver, seems to get well sooner than when treated by any other method; but the cure is not real. Instead of the cervix and mouth of the uterus being covered over by healthy mucous membrane, it is, as it were, skinned over by cicatricial tissue, which often narrows the lower portion of the uterine canal and produces severe dysmenorrhœa. If, gentlemen, any of you have had as much trouble as I often have, in overcoming the damage done by the nitrate of silver, I am sure, unless you are more charitable than most men are, you have felt like pouring out maledictions on the heads of that class of innocent practitioners who, to use the words of Dr. Emmet, think they have mastered the art, as a specialty, when they are once in the possession of a porte-caustic and a speculum. I reported a case in the *Virginia Medical Monthly*, August, 1874, of a lady who, for a simple erosion of the cervix, had been

burned by the nitrate of silver every five days for twelve months; and I think the doctor would have kept on burning her during his natural lifetime had it not been that the cauterization got to be so painful as to produce spasms and cause the patient to rebel against the treatment and dismiss her physician. When I saw her she was suffering from most painful dysmenorrhœa; the cervix was entirely closed up, save a very small opening, through which it was impossible to pass a small-sized knitting-needle.

In Uterine Hæmorrhage, reasoning from the physiological action of hot water douches, inasmuch as they diminish the calibre of the blood vessels, I concluded that it would be a capital remedy for the arrest of uterine hæmorrhage from whatever cause. Cases were not long wanted on whom I could try it and test the correctness of my theory. The following are some of the cases on whom I have tried it, and I introduce them here by way of illustrating its powerful hæmostatic action:

Mrs. M., a pale, thin woman, aged 25, who had borne a child about six months previously, sent to my office for something to arrest flooding, which had come on after lifting a good deal. I sent her half an ounce of Squibb's fluid extract of ergot (which is the most reliable preparation of ergot I ever used), with directions to take a teaspoonful every three hours until the flow ceased. The flow still continuing, I was called in the afternoon to see her. Examined her and found the os patulous and the uterus retroverted; ordered the ergot to be continued, and the vagina to be tamponed with rags soaked in vinegar; called next day and found the flow continuing about the same. I then had her hips brought to the edge of the bed, either foot placed in a chair, and a tub placed underneath her, and, by means of a Davidson syringe, we threw four gallons of hot water, at a temperature of 110°F., into the vagina, the syringe nozzle being carried well down and brought in contact with the lower portion of the uterus. This procedure completely arrested the flow, and she had no more return of it. In this case the hot water proved a more efficient hæmostatic than a reliable preparation of ergot, although the patient had been taking ergot for eighteen hours, and, in addition thereto, the vagina was tamponed.

Sarah S., aged 27, a mulatto and unmarried, aborted at the expiration of the twelfth week of pregnancy. The flow was considerable and constant for three days, during which time she took an ounce of Squibb's fluid extract of ergot, which she obtained from a neighbor whom I was treating for uterine fibroid,

when I was sent for. Wishing to try the effect of hot water in bringing on uterine action, I threw into the vagina two gallons, by means of a Davidson syringe. This checked the flow and brought on uterine action, causing the expulsion of two large clots and some shreds of membrane. Five hours afterwards the flow returned. This time we passed a pair of uterine dressing forceps into the uterus and removed a portion of adherent membrane, which was, no doubt, the cause of the return of the flow. A speculum was then introduced, and the uterus swabbed out by means of cotton-wool wrapped around an applicator and dipped in tincture of iodine. She was then directed to have hot water again thrown into the vagina. The hæmorrhage ceased and she went on to convalescence without any further trouble. It is impossible to say, in this case, whether the hæmorrhage would have ceased if the tincture of iodine had not have been applied to the inside of the uterus.

I have had, since this case, only one opportunity of trying the warm water after abortion, and this time the hæmorrhage continued in spite of ergot, warm water, and the application of the tinct. iodine to the cavity of the uterus, and I had to resort to plugging the uterus with cotton-wool soaked in persulphate of iron, which arrested the flow.

• Hannah W., colored, aged 35 years, married, has a very large uterine fibroid, which she first discovered about fourteen years ago, and during this time has generally "flowed" freely at each menstrual period. She has been under my charge for the last year, and has been treated by hypodermic injections of ergot for the reduction of the fibroid. The fibroids are now about half the size they were a year ago, at which time they filled both iliac regions, the hypogastric part of both lumbar, and extended an inch above the umbilicus. Recently I have stopped the ergot injections, having obtained all the benefit from them that was likely to follow. On August 8, 1875, she sent to me for some ergot to arrest her menstrual flow, which was unusually free and debilitating. Instead of sending the ergot, I went to see her myself, and threw four gallons of hot water into the vagina, at a temperature of 108°F. This arrested the flow at the time, but it returned in moderate quantity an hour afterwards. Directed her nurse to again throw a large quantity of hot water into the vagina. After each douche the flow got less and less, until it ceased altogether after the third application. This case more fully than any other I have treated by this method proves the correctness of Dr. Emmet's theory of the physiological action of hot water. In this case the astringing effect of the hot water

was not only directed to the uterine capillaries, but extended itself to the larger vessels supplying the fibroid, and caused the tumor to sensibly diminish in size.

It is a fact that has generally been observed, I believe, that during the menstrual period, fibroid tumors, on account of the increased blood supply to the parts, increase in size, and consequently the diminution which takes place after the flow ceases, especially should it cease suddenly, can be easily observed.

I was not aware, until after I had repeatedly tried the hot water douches for the arrest of uterine hæmorrhage, that any one else had tried it for a like object; but I find that Dr. Weidlebard (*Richmond & Louisville Med. Jour*, Oct., 1875, *Brit. Med. Jour.*, Feb. 13, 1875, *Allg. Med. Central. Zeitung*) says, "that he has used hot water injections, with the best results, in a considerable number of cases of uterine hæmorrhage, from a variety of causes, as abortion, placenta prævia, fibroids and other tumors of the uterus, *post partum* hæmorrhage and profuse menstruation, &c. He believes that hot water acts more energetically upon the uterine fibres than cold water, either with or without astringents. He makes the injections with an ordinary uterine douche—the water having a temperature varying from 95° to 100°F."

In Para-Metritis.—In para- and peri-metritis, there is no remedy which has been, in my hands, half as efficient as hot water douches. The following case will illustrate their action, and, inasmuch as I do not wish to tire you, I will include in the details of it all I have to say on the subject:

In June, 1873, I was called by Dr. Davis in consultation to see Mrs. P. The patient was a lady about 45 years old, had been married about twenty years, and had never been pregnant. Menstruation had always been difficult, and accompanied with considerable pain. At the time of my visit, she had been ill for six weeks; there was great pain in the lower part of the abdomen, and tenderness on pressure. She had fever, pains in the back, difficulty in defecation, and troublesome micturition. She was so very much worn by the pain and loss of sleep as to be unable to turn in bed unassisted. Her symptoms pointing towards uterine trouble, we made a digital examination; found the ostium vaginæ very sensitive; the uterus retroverted and exquisitely painful to the touch—indicating a great degree of inflammation. Put her on quinine and iron as tonics, and an

occasional dose of morphine to relieve pain whenever it was severe, and directed her attendant to throw large quantities of hot water into the vagina, several times daily. The douches were very beneficial in relieving the pain, and reduced the inflammation very rapidly. At the end of fifteen days from the time we commenced treatment, we were able to adjust a Hodge's closed lever pessary. She continued to improve, and in a short time was able to attend to her ordinary household affairs.

About two months afterward, and after some unusual exertion, the pessary slipped from the vagina. She immediately came down to see me, riding a distance of 15 miles in a "shackley" buggy, over a very rough road. The jolting again dislocated the uterus, and relit the inflammation. She was again subjected to the hot water douches, and, in addition thereto, we kept in the vagina, and in contact with the cervix uteri, a dossil of cotton, soaked in glycerine. She recovered in a fortnight so far that, this time, we re-introduced the pessary, after going to considerable trouble to mould it so as to fit accurately. Gave her Bland's pills and strychnine to improve her general health. She has, since that time, been getting on very well, and vows that she will not allow the pessary, which she has now worn over two years, to be removed.

In Pelvic Cellulitis.—Dr. Emmet says that hot water douches will abort an attack of pelvic cellulitis. I have seen it not only do this, but, combined with morphine, it has acted as a most reliable curative agent, after the inflammation has fully developed itself. The following case, better than anything I can say on the subject, well illustrates its beneficial action in acute pelvic inflammation:

Mrs. W., a widow lady, aged 35, rather thin and anæmic, has been under my charge for some time for intramural fibroid. On Oct. 1, 1875, I began to dilate the cervical canal with sponge tents, with a view to remove the tumor by the traction method of Emmet. In a few days, I had succeeded in dilating the canal large enough for me to pass in two fingers. I removed the tents every twelve hours, and carefully washed out the uterus and vagina with warm water before introducing another. I then passed a hook into the tumor and pulled it down considerably, when I was forced to desist on account of the great pain it gave her. Not being able to get an assistant that day to administer chloroform, I was forced to wait until I could. I introduced a very large sponge tent that I made myself, in order to keep the cervix open until I could get assistance. Next day I was, unfortunately, called to see a patient residing at a dis-

tance, and was unable to see Mrs. W. and remove the tent, until after it had remained twenty-four hours, and the consequence was a sharp attack of pelvic cellulitis, which was treated with hot water douches and morphine. I had the satisfaction of finding that all traces of inflammation had subsided in six or seven days, leaving the uterus attached to the right side of the pelvis.

It would, probably, not be out of place while speaking of the therapeutic properties of hot water douches, to mention the following case, which is not only remarkable for its rarity, but for the result of the treatment. Although I am unable to claim for the hot douches that they should be credited with the entire benefit derived from treatment, they certainly contributed towards the happy result:

June 10, 1875, I was called to see a Mrs. Moody, who was said to reside at a distance of ten miles. The road was not of the best, but what can we poor country Doctors expect? After blundering about through dim, piney woods, paths that were filled with broken rails, lightwood stumps, mud holes, and, by way of variety, strewn with numberless pine roots, I found my way to the domicile of my patient. The house was an ancient and picturesque structure, built entirely of logs, which had all the appearance of having been felled from a primeval forest; and surrounded by an acre or two of dismal and disconsolate-looking corn. I confess, I was innocent enough to ask myself if there was any likelihood of my ever getting paid, and, from the surroundings, was forced to a negative conclusion. I then thought of that charity which covers a multitude of sins; but not being possessed of the tender heart or the buoyancy of a Mark Tapley, I was unable to come out stroug under the circumstances.

After examining my patient, I found the case very interesting, and, I think, very rare. I have often observed that patients who are likely to give us most trouble and least pay, generally have, as if by a merciful dispensation of Providence, diseases which are interesting and instructive; but this is all. We never, it seems, have an opportunity of benefiting by the knowledge gained from this source; for paying people, with a singular disregard to notoriety, and, may be, decency, confine themselves to the most common place disorders. Mrs. M. had been an invalid for three years, during which time she had not been out of doors, and rarely sat up more than an hour at a time. Her husband, who was a shiftless-looking fellow, said that the family had exhausted all of their means in having her attended to, and looked as if he really meant that his words

should carry conviction with them. She complained of pain in the lower part of the abdomen, and difficulty in micturition, and said that she "knew that she was rotten down there, for her water smelt like carrion."

Vaginal examination revealed nothing wrong about the uterus, save a little cervicitis. Passing a male sound into the bladder, it was found contracted and sensitive, indicating inflammation of its mucous membrane. On turning the sound about in the bladder, and expecting to find a stone, I was somewhat startled when it glided in to a depth of seven inches, and admitted of free motion toward its point. The point of the sound could be so turned that it could be felt between the uterus and rectum. The diagnosis was soon made; this was clearly a case of sacculated bladder—the sack containing the urine until it became ammoniacal and sufficiently irritating to set up chronic cystitis. Our next thought was, how or what can we do to relieve her? Not wishing to visit her oftener than I could avoid, I determined to make the treatment as simple as possible, and such as she would be able to carry out herself. The indications were, to keep the sacculated portion of the bladder as empty as possible, so as to prevent the decomposition of urine; and for that purpose I directed her always when she wanted to urinate to get in the knee-elbow position. This would allow the urine, by its own gravity, to flow through the rent into the bladder, and then be discharged.

For the cystitis, we concluded to use hot vaginal douches, which we know will control the whole pelvic circulation; and if we were enabled to diminish the vascular supply to the mucous membrane of the bladder, the cystitis, after the cause of the trouble, which was the presence of decomposed urine, was removed, and thus aided, might get well; and the bladder—that is, the part not sacculated—would probably return to its normal condition. The woman was very feeble, and for the purpose of building her up, we put her on strychnine, iron and chlorohydric acid. This treatment has been continued for the last four months. When last heard from, she had so far recovered as to be able to walk all over that dismal patch of corn, and had actually been regaling herself by catching grasshoppers. The hot douches in this case, no doubt, contributed a great deal towards the happy result, by giving tone to the whole pelvic viscera; but my opinion is, the position she assumed should have the greatest credit.

In Tumors.—Hot water douches not only subdue inflammation by lessening the blood supply, but act as a powerful sorbifacient, and will cause heterologous growths and tumors to dis-

appear when the parts containing them are subjected to their continued and frequent use. I have discovered from the small number of cases in which I have tried hot water, that the greater the temperature the more rapid will be the disintegration. Patients after awhile get accustomed to use the douches, and can use them at so great a temperature that they cannot bear their hands in the water. The following is the first case of tumor in which I tried the hot douches, and it illustrates its sorbifacient power, independent of its quality as an arrester of blood supply :

In January, 1875, I was called to see Mrs. H., a delicate woman, aged 23. She had, a few days previously been delivered, after an ordinary labor, of a boy child. About the labor there was not the least complication, so far as could be ascertained from the lady herself, or from any of her attendants. She complained of pain in the left hip and inside of the left thigh, and was having a little fever. There were evening exacerbations of both pain and fever. On inspecting the parts, we found no redness on the inside of the thigh, not much pain on pressure in the left iliac region, and no tumor or any enlargement of any kind. She said that after her previous delivery, she suffered with pains similar to those above described. We prescribed morphine and quinine, and directed that we be sent for in case she did not improve. She continued about the same for four or five days, when she began to complain of great pain in the right thigh, right iliac region, and a difficult micturition. We were again sent for, and this time we discovered a tumor filling the right iliac part of the right lumbar, and the right side of the hypogastric. There was no trace of this tumor at our previous examination. Per vaginam, the uterus and vagina were found pushed toward the left side of the pelvis, and a point of the tumor extending down the right side of the urethra. We diagnosed the case as one of sub-peritoneal pelvic hæmatocele ; but, to make sure, the tumor was aspirated through the vagina, and four ounces of bright, clear blood were drawn off. This did not diminish the size of the tumor, which caused us to think that hæmorrhage was taking place into the sack as fast as removed, and that, under the circumstances, it was extremely hazardous to cut into the sack and attempt to turn out the blood. For the first few days, the pressure of the blood upon the urethra was so great as to necessitate the frequent use of the catheter.

Under the influence of tonics, potassi iodide and rest in bed, the sérous elements of the blood were removed, leaving a clot, apparently the size of a lemon, situated on the right side of the

vagina, with a point extending down on the right side of the urethra. The clot caused pain down the right thigh, and interfered with locomotion. The iodide was kept up as long as it seemed to be of any benefit. We then, in hope of discussing the tumor, resorted to puncturing it with a cataract needle through the vagina. I was much disappointed at this method, as it did not produce the least diminution in the size of the tumor, and besides, was very painful. We then directed her to have thrown into the vagina two gallons of water, as hot as she could bear, twice daily, and in the event this should fail, we had determined to inject some irritating fluid into the center of the tumor, so as to cause it to suppurate, and afterwards cause it to be discharged through the vagina. Under the hot water treatment, the tumor steadily decreased in size, locomotion became more easy, micturition less difficult, and, by August, had entirely disappeared, and Mrs. H. was well.

My experience in the foregoing case led me to try hot water douches for the purpose of producing the absorption of uterine fibroids. The result of treatment in the case of Mrs. H. plainly shows that the hot water douches possess great sorbifacient powers, and we know that it is a reliable means of diminishing the blood supply to a part. These two properties combined would, it seems to me, meet all the indications for the treatment of these neoplasms. Only two cases have fallen into my hands on whom I could try this treatment—one a case of intra-mural, and the other a case of large sub-peritoneal fibroid. These patients have been using the hot water only a short time; but there has been in one of them a marked diminution in the size of the tumor; and in the other, who has been using the douche only a few weeks, the tumor is perceptibly smaller.

I am, so far as I am aware, the first and only one who has attempted to produce the absorption of uterine fibroids by the use of the hot water douche; and, although the cases in which I have tried the remedy are not yet cured, I think the diminution that has taken place during the short time these patients have been under treatment, will justify us in predicting at this early day that the method, if it receives a just and persevering trial, has a brilliant future, and may do a great deal toward relieving that unfortunate class of cases.

If I had an opportunity of seeing a great number of cases of uterine fibroid, I would wait until I had tried this remedy fully

before I said anything about it; but knowing that all of you, or, at least, nearly all of you, like myself, rarely have an opportunity of investigating a special class of diseases, I thus (and I hope not prematurely) call your attention to the facts in these two cases, and ask your co-operation in the investigation of the subject, and if we, by our united efforts, discover that hot water douches are a reliable remedy in the treatment of uterine fibroids, I think it can be said of us that we have done some substantial work towards discovering means of relieving human suffering; if we fail, we have only done so in the line of our duty.

Now, gentlemen, after again thanking you for the honor you have conferred upon me, and the patience with which you have heard me, let me add that, although I have made no attempt to be "scholarly," I have given you cases just as they have occurred; and, in plain, honest words, have spoken those things that I do know.

NOTE A.—The hot water should be kept at one temperature during the douches, and not allowed to fall, which it will do if patients are not instructed to continue to add hot water as fast as it cools.

NOTE B.—Since the above address was delivered, I have had under my charge seven other cases of fibroids. All of them have been put upon the hot water treatment, and for the first few weeks all the cases improved, and the fibroids diminished somewhat in size; afterwards they have remained stationary. The reason of this, I am inclined to think, is due to patients not persevering in the treatment. The cases were all negroes; and those who have had much to do with this class of people know how difficult it is to get them to persist in any kind of treatment for any length of time. Although I do not think as much of this method of treatment as I did at first, I still think it worthy of trial.

Female Doctors in California.—The *Pacific Medical and Surgical Journal* states that during the recent session of the California State Medical Society five female physicians, lately graduated, joined the Society without opposition.

ART. II.—*The Physiological Action of Quinia.* By CHARLES DUFFY, Jr., M. D., Newbern, N. C. (Read before the Eastern Medical Association, December, 1875.)

Mr. President,—In attempting to fulfill my appointment to write an essay "*On the Physiological Action of Quinia*," it is hardly necessary for me to remind you I have nothing original to offer; mine will be a work of compilation, or, rather, a short statement of what seem to me to be facts, gathered from the works and researches of others.

The first physiological manifestations of small therapeutic doses of quinia, in man, are ringing in the ears, slight fulness in the head, and some deafness. These symptoms are usually intensified by larger doses; frequently disturbed vision, flushed face, and other symptoms of cerebral congestion, are added, and rarely, as I have witnessed, a papular eruption over the trunk and extremities. Hæmorrhage from the nose, bowels, bladder and other mucous surfaces, have been attributed to its toxic influence; and sometimes these effects seem to be produced by the usual therapeutic doses; but it may be well to bear in mind that what is an ordinary therapeutic dose for one patient may be poisonous to another.

Eulenberg's experiments served to convince him that quinine is not a nerve stimulant, but a muscle stimulant. In contact with the nerve, it produces no contraction of tributary muscles, while in contact with muscle, it produces violent action. "When given in sufficient quantity to dogs, it produces restlessness, followed by muscular tremblings, which have been compared to paralysis agitans, loss of power, deepening into more or less complete paralysis, great dyspnœa and cerebral symptoms, such as blindness, stupor, &c., or delirium, dilated pupils, coma and convulsions. When introduced by the stomach, vomiting generally occurs, and, at times, diarrhœa."

Toxic doses cause "complete deafness and blindness, embarrassment of respiration, great weakness, paralysis, and, finally, collapse." Prof. Wood says the minimum fatal dose of quinine is not known, but it must be large, and probably varies much. In the famous case of Bazire, two ounces caused his death, whilst

his wife barely recovered from the effects of one ounce. A case was reported by Prof. Dickson, of Philadelphia, a number of years ago (time and place of report not remembered), wherein a small girl took by mistake a large teaspoonful of the closely packed sulphate; no alarming symptoms ensued, and cinchonism passed off, without treatment, in 24 hours. "Dr. Franssig, of Rome, relates the case of a soldier of small size, stout constitution, aged 30, named Albitz, who took by mistake one ounce of quinine, and, except deafness and a kind of stupor, no bad effects ensued, and no antidote was administered." (*Richmond & Louisville Medical Journal*, Jan., 1874.)

In large doses, it is said to abolish the functions of the cerebrum. Eulenberg and Chaperon seem to have proved it abolishes reflex action before voluntary motion when administered in poisonous doses. Thus, frogs poisoned with it would immediately turn into their normal position when laid on the back, even though no movement could be excited by irritation of the skin. Chaperon thinks this lessening of reflex action is not due to its direct influence on the cord, but to its effect on the inhibitory reflex centres, which, according to Setchenow, exists in the cerebrum of the frog.

Upon the stomach and intestines, it is said to act as a simple bitter—in small doses, stimulating appetite and promoting digestion; in large doses, it often causes nausea and vomiting—some think it has even caused gastritis.

Experiments of Briquet, Eulenberg and Schlockow, prove that in large doses quinine causes lowering of arterial pressure and slowing and enfeeblement of the heart's action; and clinical observation has established, beyond refutation, its directly sedative influence on the heart and arterial system.

Observers are at variance in regard to its action on the spleen—some asserting it causes rapid shrinking of the organ, while others deny any such influence. In some pathological conditions of the spleen its action in this respect has seemed to me to be very decided.

Bonorn, Arvedi, Magendie, Monnevet, Melier and Baldwin found the blood of animals killed with quinine "to be dark, defibrinated fluid, and incapable of forming a clot." On the other hand, Briquet contends that its continued use augments the pro-

portion of fibrin, but lowers that of the red corpuscles. Prof. Binz announced, in 1867, that quinine added to human blood in the proportion of 1 to 4,000, immediately checks the amœboid movements of the leucocytes. This has since been confirmed by Scharrenbreich, Kerner and Geltowsky. Estimating the quantity of blood to each adult male at 200 ounces ($12\frac{1}{2}$ pounds), 24 grains would be required to furnish the equivalent indicated by Binz.

According to Binz, quinine lessens the ozonizing power of the blood. This effect may contribute to the knowledge of the manner of reduction of temperature after large doses of quinine.

Dr. Pringle, in 1765, "called attention to the fact that cinchona bark, in decoction or powder, had the power of preventing putrefaction in flesh." Mayer, Parisi, Hallier, Herbst, Polli and Binz, by very elaborate researches, "have demonstrated that quinia, in the proportion of one part to three hundred, will preserve for a long time flesh, milk, butter, meal, urine, albumen, &c., and will check very markedly alcoholic fermentation in honey and syrup. Binz has demonstrated that this antiseptic action is due to the poisonous influence exerted by quinia on the fungi, which are the immediate cause of these changes."

This observer has proved that the larger infusoria are killed by a solution of quinia of 1 to 800 immediately, and of 1 to 2,000 after some hours. Upon the penicillium, vibrios and bacteria, as well as upon the infusoria, quinia is said to act with similar fatality. A much stronger solution, however, is required to kill vibrios and bacteria.

Much has lately been written on the oxytotic action of quinia. Believing it unprofitable to consume time with an analysis of the testimony on both sides (the question having been freely discussed at a previous meeting of your body), I think you will bear me out in the assertion that, in therapeutic doses, it exerts no harmful influence on the gravid uterus, as a rule.

Dr. Albert H. Smith, in a paper before the Philadelphia College of Physicians (*American Jour Med. Sci.*, July, 1875), praises the effects of quinia in promoting normal labor. His experience was based on trials of it in forty-three cases, and he sums up his conclusion as follows:

"1st. It has no inherent property of stimulating the gravid

uterus to contraction—being inert as to any effect on the womb in a quiescent state, and having no decided action in accidental labor at any period of gestation. 2d. That to its property as a general stimulant and promoter of vital energy and functional activity, and to that alone, is due its influence upon the uterus in normal parturition, promoting then no action due to itself, but merely increasing the power of the uterus to expel its contents by its own natural method, converting what is a defective, or even pathological action, into a simple physiological process. 3d. That by availing ourselves of this power we may, by administering full doses of quinine at the outset of labor, favor the rapid and safe termination of what might otherwise be a tedious and exhausting process.”

The effects of quinia on the auditory nerve has probably not received the attention its importance demands. Dr. D. B. St. John Roosa, after an analysis of a number of cases of what seemed to be quinia trouble, failed to convince me that it often causes damage to the nervous structure of the ear. He, however, leans decidedly to that side of the question.

That wonderful instrument, the spectroscope, in the hands of Dr. H. Bence Jones, disclosed to that observer a substance in men and other animals, which very closely resembles, if it be not identical with quinia, to which, believing it to be an alkaloid, he gave the name of animal quinoidin; other observers have verified Dr. Jones' discovery, and have placed the normal fluorescence of the blood at from 3 to 6. Drs. Rhoads and Pepper found the fluorescence of the blood in patients suffering from malarial fever to be as low as 0 to $1\frac{1}{2}$. This beautiful theory has not fulfilled the promise at first held out by it; and it has lately been marred by the discovery that this fluorescent body exists in various foods, and even vines, and is probably not of animal but of vegetable origin.

As to how quinia finds entrance into the blood, Dr. Kerner thinks that it is by absorption from the stomach; that the acid gastric juice rapidly dissolves and puts it in a condition most favorable for absorption.

If, however, it escapes from the stomach into the intestines, it is liable to be precipitated by alkaline juices, as well as by bile, whose acids form very insoluble salts with it. Failing, therefore,

of absorption by the stomach, it is carried out of the system with the feces. This readily accounts for the inertness and inutility of the drug in many cases where its therapeutic influence is often so much to be desired, and no doubt is the explanation of the disappointment of those physicians who accord to it no remedial influence in the graver malarial diseases.

According to Binz and Landerer, quinia is eliminated by the kidneys, sudorific and lachrymal glands, as well as by the mammary glands of nursing women. Briquet found it in the urine in half an hour after the administration of a large dose. According to Binz, three-fourths of the entire quantity ingested is eliminated in forty-eight hours. Dr. Thau puts its rate of elimination as high as twelve hours for three-fourths of the ingested quantity—somewhat less than half escaping during the first six hours.

Quinine causes decrease in the elimination of urea and uric acid; phosphoric acid and nitrogenous material. Small doses are said to increase the elimination of kreatinine; large doses decrease it. Quinine is said to be a tonic; in fact, almost all authors claim for it this influence in small doses. I deny that it has any such influence, either in small or large doses. The term tonic I hold to be, to say the least, a very unacceptable one, and I think it might with propriety be displaced from its accustomed position in works on therapeutics. Quinine will not, nor will any other medicine, increase the normal strength of any animal; we may rely, as a rule, on a cathartic to act on the bowels, whether in normal or abnormal condition, or on an emetic to produce vomiting, or chloral to produce sleep in the man who may have already slept sufficiently. Quinine may, by restoring some lost ingredient of the system, or by destroying the germ of disease, put the patient in condition speedily to regain his *lost* strength; but would not an emetic do the same, by dislodging from the stomach some depressing ingesta? Or would not a brisk cathartic, by removing some irritant from the bowels, be the means of restoring lost strength? Or would not even the poison, mercury, by its influence on syphilitic persons, accomplish as marked results as either? Quinine, then, may, by its stimulating influence on the follicles of the stomach, or by some other mode, improve the appetite and digestion, but you

will all agree with me, no doubt, that minute doses of ipecac will often do the same. Ipecac, then, has as much right to the appellation of tonic, or stimulant, as quinine; as also have even blood letting, amputation, lithotomy, &c.

It is interesting to study the action of quinine in combating the various pathological conditions for which it is lauded; and it is remarkable with what facility can be furnished the rationale of its therapeutic influence in these conditions—a ready *modus medendi* for every pathological theory that may have been advanced. Take, for example, high temperature and inflammation. The condition, says one, is augmented ozonizing power of the blood. Quinine is ready to diminish that power, rendering it almost *nil*. The red globules are diminished in size, says another; quinine increases the size of the red globules, and the temperature subsides. The relations of the vaso-motor and sensory systems are disturbed; quinine reduces exalted sensibility, and gives back to the motor system its lost function. Again, the white globules wander out from their path of duty; quinine interrupts amoeboid movement, and the life current goes smoothly on again.

Examine once more the various theories entertained in regard to malaria. Is it a poison acting “primarily upon the blood, altering and destroying its corpuscles?” Here quinine must act as an antidote, and so it has been claimed for it. Does malaria exert its influence on the system by periodically interfering with the circulation, causing recession of the blood from the superficial capillaries, and its accumulation within the viscera? Quinine is said to meet this difficulty by its antiperiodic influence. Does malaria operate through the nervous system, disturbing proper balance? Quinine once more fulfills the indication, and restores and maintains equilibrium. Does malaria act as a ferment in consequence of the accumulation in the blood of palmella or other cryptogams or infusoria? Quinine arrests fermentation and destroys fungi. Do bacteria, micrococci, colpoda paramecia, etc., hold prominent places as factors in these disorders? Quinine is among the few agents that can destroy these entities without damage to the human system. Have we, as a condition of malarial fever, absence or diminution of an important normal ingredient of the system—animal quinoidin or

tannin? We have here shown that quinine is almost identical with it, and by its administration we can speedily restore it, and set the disordered machinery at work again.

Amid these varying theories, quinine has held its own in the estimation of the medical world; and, although we may accept none of them as settled, we still believe that it is in some way beneficial—our disappointment by the failure of theories in no manner shaking our faith in the value of the drug.

ART. III.—*Diphtheria*. By W. T. ENNETT, M. D., Ashton, Pender County, N. C. (Read before the Eastern North Carolina Medical Association, December, 1875.)

Mr. President,—I have been appointed by your Society more than once to write an article on this disease, but from time to time have failed to do so; but as the ravages of this disease have been so fearful in this community for the past twelve months, so many families deprived of their children, and entire families destroyed by its results, I have concluded to give the Society the benefit of my sad experience.

Diphtheria is an epidemic sore throat of great severity, due to toxæmia, attended with much prostration, and characterized usually by the exudation of false membrane on the tonsils and adjacent parts.

Pathology.—Diphtheria is a specific blood disease, which runs a rapid course. A spreading inflammation of the fauces, œsophagus, respiratory tract, with the exudation of lymph, seems to be its anatomical character. When a patient recovers, some remarkable nervous affections are apt to supervene; this occurs as well after mild cases as after the more severe. Diphtheritic affections sometimes occur sporadically; they often seem to be endemic, while they are also epidemic and contagious. Brettonneau asserts that those who attend patients with diphtheria cannot contract it unless the diphtheritic secretion is placed in contact with a mucous membrane or a part of the skin denuded of epidermis.

•Diphtheria attacks both sexes, all ages, though children seem to be especially obnoxious to it. It is probably most fatal to

the poor, or such as reside in damp and badly drained localities. Spring and Autumn seem to be the seasons when its ravages are greatest.

Symptoms.—Diphtheria sets in very gradually, with feelings of depression, drowsiness, muscular debility, headache, nausea, chilliness; before the throat becomes sore a sense of stiffness in the neck is complained of; the tonsils become inflamed and swollen; as the inflammatory action proceeds, it involves the velum, uvula, posterior part of pharynx, &c. The characteristic feature of the disease now becomes manifest, and a plastic, fibrinous material is effused. This exudation commences in the nasal fossæ, on the soft palate, or on one tonsil, or on the back of pharynx, in the form of small, ash-colored spots. As the disease spreads, the false membrane increases, and becomes firmly attached to the mucous tissue beneath; if you forcibly remove it, a new one will appear in a few hours. The browner or blacker the color of the deposit, and the more dense its texture, the greater the danger. As the deposit is cast off, we may have ulceration, sloughing, or gangrene of the mucous coat. True diphtheritic membranes may form on abraded cutaneous surfaces.

Death may happen from hæmorrhage, gangrene, slow exhaustion, or from asphyxia. Fatal terminations take place sometimes very suddenly, and, as I believe, from the deposition of fibrin within the heart or within one of the large vessels, and not from syncope, as has been commonly stated.

Prognosis.—In all cases, this is a very grave disease. Death may occur within thirty-six hours, though the duration of the disease is commonly from three to fourteen days. Albuminuria, suppression of urine, epistaxis, a very rapid or a very slow pulse, delirium, somnolence and dyspnœa, are the especially alarming symptoms.

As to the *diagnosis*, it seems to me useless to say anything on that point. You will hardly mistake it; but if you are in doubt and cannot settle the question in your own mind, from the appearances of throat, &c., if you will place a blister on any part of the body—say four by six inches—you will find around the blister the characteristic exudation or an eruption, if you have a case of diphtheria; if not, then you have not, in al

probability, diphtheria. I want some of my medical brethren to try that diagnostic method, and see if it is not true.

Treatment.—There is no specific for this fearful disease. All that we can attempt to do is to guide the patient safely through it. I have seen all treatments fail in turn. We have patients apparently doing well at the end of five or six days, pulse good, cheerful, yet, in a few hours, the exudative inflammation may extend to the larynx, and rapidly cause asphyxia and death. Among the first cases I ever treated was a sprightly little girl, the idol of her parents and pet of the neighborhood. I worked hard for her recovery. I prescribed in her case, finding a malarial complication, $\frac{1}{2}$ gr. calomel and 2 grs. ipecac every 4 hours; chlorate potash, 4 grains every 4 hours; also, to use the latter freely as a gargle. I gave quinine 4 grains at the same time I gave the potash. At the end of two or three days, the child was seemingly doing well. I felt relieved. On the next day, I noticed a little depression, and on examination found albumen in the urine. I at once ordered tincture perchloride of iron and quinine—15 drops of iron and 5 grains quinine every four hours. She seemed to improve finely. On the fifth day, Drs. Charles Duffy, Jr., and Lucas, being in the neighborhood, kindly consented to see her with me. They expressed themselves as pleased with her appearance, as also with the treatment. Going home, we were speaking of how treacherous and deceptive the disease was. Dr. Duffy remarked, he would not be surprised if the family sent for me before I could get home. Sure enough, as we drove into the gate, a messenger came, saying the child was worse, and when I reached her, I found a clot had formed in the heart. I gave ammonia, and used all the means in my power; sent for Dr. Satchwell in consultation, but even with his ripe experience and skill, nothing could be done, and she died on the next day. I speak of this case to show how deceptive it is.

I treated several cases during the same season, in the same way, but lost no others. Since that time, when called in early, I have given an emetic, ipecac and ammonia, followed by some alkaline drink, and have been successful in some, and unsuccessful in others. I have used gargles of permanganate of potash, of iron and glycerine, and in some cases all will fail. Limited

confidence is to be placed in the effects of all medicines, whatever you may select.

My aunt, who was in Hartford two years ago, when the disease was raging so terrifically there, being at my house this summer, when it was killing whole families in Wilmington, and was also terribly fatal in the surrounding country, asked me to try the Hartford Doctors' treatment, which was the same as ours, with the exception of external applications of "fat meat." I could not nor cannot see the virtue, but promised to try it; I used it, and my patient got well. I still did not look upon it as effecting the disease at all. I used it again and again, and the patients all got well. I tried to study out some physiological action, but could not. I wrote to an eminent physician in Hartford, and he writes me, "We regard it as an old woman's remedy; but the Doctors all use it, and since its use the mortality has not been more than one-third. What it is and why it is, I don't know; but might it not have some antidotal action on the poison?" Since then, I was called in consultation in the adjoining neighborhood, where the attending physician had lost three or four in one family, and another patient was almost dead. I was almost ashamed to recommend my fat meat, but I did it, and the child got well. Of course we used all other necessary treatment. I certainly should not rely upon it alone; but, as it cannot possibly do any harm, I shall continue to use it as an external application, asking some others to try it. I am satisfied leeching and blistering do harm, and in my hands, poultices and fomentations fail to give any relief. In short, where there is no malarial complication, I would use remedies of a supportive kind, and I know of no better agent than quinine and tincture of iron. When we have the malarial complication, I find a little calomel and ipecac, in small doses, given at intervals of every four hours for twenty-four hours, to be the best internal treatment, at the same time that I use quinine and chlorate of potash; and, if you find it necessary, use your supportive remedies afterwards. In other words, treat the symptoms as they occur.

ART. IV.—*Cases Illustrative of the Use of Pepsin in Nausea and Vomiting of Malarial Fever.* By F. DUFFY, M. D., Newbern, N. C. (Read before the Eastern [N. C.] Medical Association, December, 1875.)

The following cases occurred in the month of September, 1875:

I. B. C., æt. about 70 years, had a severe malarial fever of remittent type. Nausea and vomiting, although occurring; were not as prominent as in the succeeding cases; he was treated with quinia, gelseminum and morphia, under which treatment the fever was soon subdued. Ice was freely allowed; sinapisms were applied to the epigastrium; bowels were open. Patient continued to complain of nausea, and he reminded me that I had on some previous occasion given him something which was "very good for sick stomach." I found in his possession an acidulated solution of Scheffer's saccharated pepsin, which was the article to which he alluded. He resumed the use of the pepsin, and was soon relieved of the troublesome nausea.

II. A little girl, æt. about 5 years. She had seemed quite well, but had eaten freely of Scuppernong grapes. After a lapse of 24 hours, during which time she had no action from the bowels, she was attacked with a violent headache and fever. The father gave quinine with some freedom (quantity not known), and, after the lapse of about twelve hours, sent for me. The patient was very restless when I arrived. Nausea and vomiting were very prominent symptoms. Temperature 102°F. A purgative being required, I administered 5 grains of calomel, partly for the reason that it was hard to vomit this heavy agent, but vomiting succeeded the dose so soon that I judged the most of it to have been ejected. But I repeated the dose in a few minutes with better success; still, vomiting continued, and probably some of this dose was lost, as the bowels were not moved. Four grains of quinia and about $\frac{1}{16}$ th of morphia were given every four hours. Ice was freely used; also bruised mint, with brandy and ice water. A small fly blister was applied to the epigastrium, and inhalations of ammonia, camphor, vinegar, &c., as seemed to please her, were kept up. I was sent for a second time the next night, and on visiting the patient found the temperature natural, but nausea and vomiting unabated. The bowels were imperfectly moved by an enema. Several stimulating enemata were administered with Davidson's syringe, and retained by compression; these brought away some grape seeds and a small quantity of solid, feculent matter—the water also

being stained. There was temporary abatement of the vomiting—patient falling asleep, but soon to be aroused by a recurrence of vomiting.

Having, on my second visit, provided myself with a solution of pepsin, gr. j to the drachm, with about $\frac{3}{4}$ of a drop of muriatic acid, I now administered f3ij of this solution, and directed the same quantity to be given every three hours until a few doses were taken, after which the intervals were to be six hours and the quantity one half. The child did not vomit again after the first dose. The quinine, which had been discontinued for a period of about eighteen hours, was now resumed in less quantity, and the child had no return of fever or vomiting, but continued to do well. The question may here arise, how far was the vomiting due to malarial fever, or how far to obstruction of the bowels? I think it was chiefly due to malarial fever. Constipation had existed but a short time before the seizure, which was sudden, and accompanied by considerable rise of temperature, which, from the statements of the parents, was probably highest before I saw the child. There was no tympanitis of the abdomen, nor could any lumps be felt. The calomel may have been nearly all ejected in the thick mucus which was repeatedly vomited; after the bowels were well moved by the injections, vomiting returned. Some of the nausea was most likely due to quinine prescribed during my first visit, when it was highly necessary to subdue fever, and as I had to return speedily, the patient being eight miles from town, and did not suppose the vomiting would continue, I did not administer it hypodermically or by the rectum. I wish to note the fact that the quinine on second trial (while the pepsin was also used) did not cause vomiting, as it often does with children in less aggravated cases.

III and IV.—E. W. and his wife, æt. respectively about 35 and 30 years; well-marked cases of remittent malarial fever, in both of which nausea and vomiting were prominent symptoms. A copious draught of warm water was administered to Mrs. W. to assist in freeing the stomach of the bile and mucus, which she had been bringing up by violent retching, as well as to render the effort easier. As soon as this draught was ejected, an effervescing draught, containing quinia grs. x and morphia gr $\frac{1}{3}$, was administered. In the meantime, the epigastrium was reddened by a sinapism, and other arts employed to keep the dose down, which succeeded. But, notwithstanding the use of ice, lemons and agreeable inhalations, vomiting returned after a few hours. Mr. W. had been drinking freely of iced lemonade, which he as freely vomited. He was also mustardised [?] and given an effervescing draught with quinine and morphia, which we could

not induce him to retain. A hypodermic injection of morphia was given, which quieted him, and enabled him to retain pills of quinia and a little morphia, which were flavored with oil of peppermint. Vomiting returned in both these cases in a few hours, when a solution of pepsin was administered, f3ij every three hours. They ceased to vomit immediately after the first dose. After a few doses, the intervals were increased to six hours.

Pepsin had now become one of my first prescriptions in all cases similar to the above, and though the results were not always so striking, other cases occurred illustrative of its value, and in no case was its use to be deprecated.

Case V is the best illustration I can give of its partial failure, and this probably depended on complications:

Mrs. M., aged about 25, rather reduced in health, was attacked with malarial fever. When first seen, temperature was about 103°F. She complained of nausea, but was not vomiting; bowels had been moved. She had some obscure nervous sensations, which, I thought, depended on some uterine trouble. I was informed she had gone beyond the time of regular menstruation, but, after a few weeks, the flow appeared in greater quantity than usual. I made a digital examination per vaginam, by which I ascertained that the uterus was somewhat heavier than it ought to be, and that the fundus was toward the sacrum. I caused her to assume a semi-prone position (the hand still retained in the vagina), and pressure being made in an upward direction on the fundus, its restoration was readily effected, after which she expressed herself as feeling better. I had no pessary with me, and, moreover, thought it doubtful that one could be well borne. In addition to the usual treatment, I prescribed pepsin in solution f3ij every six hours, or oftener if required to check vomiting. Next day, I heard that vomiting ensued some hours after I left, and was quite troublesome, notwithstanding a variety of expedients. I then prescribed a few doses each containing oxalate of cerium grs. iij and sulphate of morphia gr. $\frac{1}{4}$, one to be given every three hours. This was of doubtful efficacy. The ensuing night, she was visited by my brother, Dr. Charles Duffy. He found her very much depressed and frightened, but she had no fever. Under the use of diffusible stimulants, ammonia, &c., and afterwards bromide of potassium, she did well, and after a few days was up. It is likely that the uterine complications had something to do with the obstinacy of her case.

Vomiting is often one of the most troublesome symptoms with which we have to contend, and, according to my observation,

varies in degree and frequency of occurrence in different seasons. Those who practise in the country, and have to leave remedies and directions, with no opportunity to see or hear from the patient for days or weeks, will appreciate any suggestion which will be useful in such cases. On theoretical grounds, an artificial gastric juice would seem to be indicated in cases of non-secretion or of vitiated secretion. Dr. J. C. Dalton states that from four to six drops of dog's bile will precipitate completely $\frac{1}{3}$ of gastric juice of the same animal; and that the filtered juice is wholly incapable of digestion. It may be that such gastric juice is also less capable of absorption. We can readily understand how any albuminoid substance, easy of digestion under proper conditions, must remain undigested if these conditions do not exist, and must ferment, and, by its presence, cause disgust or nausea. Now, any effort at vomiting by compression of the abdominal walls and reversion of peristalsis, may cause the bile, which may not be at all redundant, to escape from the duodenum to the stomach, the effect of which has already been indicated. If food is retained in a stomach in such a condition it cannot be digested; if medicine requiring no digestion is retained, can it be absorbed?

The vomiting of bile suggests to the patient, and often to the physician, the idea of redundancy. The rational indication is thought to be purgation, regardless of the previous condition of the bowels and amount of ingesta. Purgatives, if retained, are, with the exception of the most irritating, too slow for the emergency. It is most rational to encourage the disposition to vomit by copious draughts of warm water, which the patient will usually aver cannot be swallowed, but which can be very easily swallowed, and is, if taken in sufficient quantity, very easily vomited. But if the quantity taken is not vomited, it rarely fails to benefit the nausea. After free evacuation, the stomach is in better condition to retain the pepsin, or anything else which may be required. The revulsive effect of a stimulating enema is often of much advantage, and, as a means of restoring the natural peristaltic action, has the advantage of speed without burthening the stomach.

The above plan, with some variations, has been, with me, very successful in some cases of nausea and vomiting of malarial fevers which had not yielded to means more agreeable to the patient.

ART. V.—(1) *Chronic Dysentery, with Phthisis Pulmonalis.* (2) *Sub-Acute Pleurisy in a Nursing Woman.* (3) *Eight Attacks of Articular Rheumatism without Cardiac Complications in a Boy* (A Clinical Lecture at the College of Physicians and Surgeons, New York City, by ALONZO CLARK, M. D., Professor of Pathology and Practical Medicine). Phonographically reported by a Special Reporter.

Case I. Chronic Dysentery—Phthisis Pulmonalis.—History.

A pale, feeble woman, about 40 years old, was presented, who said that she had suffered from diarrhoea since last September—nearly 8 months. It seemed to have begun as a moderately acute dysentery, for the discharges at first were more or less bloody, and accompanied with considerable tenesmus. The discharges continued for two or three weeks, when the blood disappeared, but the bowels continued to move three or four times daily up to the present time.

Comments.—In all probability the continued discharges from the bowels are dependent upon remains of ulcers produced by the dysentery which occurred last September. That is not certain, however, from the history as far as obtained; it is only probable; for it is only by microscopical examination of the discharges that the question can be settled. If ulcers remain, shreds of mucous membrane will be found, and also some purulent matter.

There are two forms of chronic dysentery, quite commonly called chronic diarrhoea. One is attended by ulceration of the colon; the other by a smooth, glossy appearance of the mucous membrane, with here and there spots of diphtheritic exudation. At autopsies made upon soldiers who died of so-called chronic diarrhoea in Bellevue Hospital, subsequent to the Mexican war, ulcerations were uniformly found along the colon. At autopsies made upon soldiers who died of so-called chronic diarrhoea in Bellevue Hospital, subsequent to or during the late war, most of whom came from the Virginia campaign, ulcerations were not found, except occasionally; but almost invariably the mucous membrane of the colon was found shining and vascular, with here and there white spots, which were very generally diphtheritic deposits. The chief feature, however, was the red and glossy condition of the mucous membrane. In such cases, no

shreds of mucous membrane were detected by a microscopical examination of the discharges. It was assumed that in the case now before the class ulcerations are present, because it had its inception in an attack of acute or sub-acute dysentery, and probably some of the ulcers have remained unhealed.

With regard to the *treatment* of such cases: The plan adopted by Prof. Clark in the Hospital was to divide the patients into classes of five or six, and then administer the same medicine to all, but change the diet of the several classes, and thus learn the best diet to be employed. It was found that substantial food, the better part of which was digested in the stomach, was most serviceable, such as beef and eggs, and but very little of what was known as slop-diet. In all the cases, both Mexican and Virginian, oily food of some kind was very beneficial. For that purpose, emulsion of cod liver oil may be employed, and, in private practice, cream, taken freely. Again, the patients were divided into classes and kept upon the same diet; but different medicines were administered to the several classes. In that way it was ascertained that a pill made of the sulphate of zinc, $\frac{1}{4}$ to $\frac{1}{2}$ grain, with one grain of opium, and administered two, three or four times a day, was the most efficacious. These conclusions were arrived at while treating the soldiers from Mexico. The same plan was adopted while treating the soldiers who came under his charge after the last war. The Doctor came to the same conclusion with reference to the diet, but with reference to the medicine, he had found, as the most efficacious combination of remedies employed, a powder composed of

R. Bismuth. subnit.....grs. v.

Morphia sulph.....gr. $\frac{1}{12}$.

M. And take two, three or more times a day.

There are certain questions, however, which are to be asked in relation to the case under examination, in order to make the clinical record complete. The answers to these questions might have some bearing upon the so-called chronic diarrhœa. The patient has a cough, accompanied by considerable expectoration. She had night sweats, which are probably dependent upon the fatigue attending severe spells of coughing. The cough began after the commencement of the dysentery in September. Upon physical examination, it is found that the pulmonary disease had

advanced to the destruction of lung tissue, for there are unmistakable evidences of a large cavity at the right apex. That fact leads to the supposition that there is perhaps a tuberculous deposit in the mucous membrane of the small intestine, which has resulted in ulceration or a mere thickening of the mucous membrane, with increased vascularity; and that the dysentery might have been made more persistent by the complication. There is no reason to doubt that the beginning of the disease was in the attack of dysentery; that the ulcers have not healed, perhaps because of the deterioration of health by the pulmonary complication. Tuberculous diarrhœas sometimes behave a little singularly. When the diarrhœa is upon the patient, it is often noticed that the hectic, which had previously existed, is relieved. There is often an alternation between the severity of the cough of phthisis and the diarrhœa—the cough continuing, but more severe when the diarrhœa is relieved.

Tuberculous diarrhœas are regarded as the most obstinate of all; still they may sometimes be controlled. One of the most serviceable prescriptions is the bismuth and opium powder already mentioned. The Doctor believes that that particular medicine would control more diarrhœas better than any other that is employed. A good thing to be used with it is a decoction of the fine roots and bark from the large roots of the common high blackberry. A tea made by adding an ounce of the bark and roots to a pint of water is very astringent, and at the same time tonic, and might be taken in doses of half or a whole wineglassful two or three times a day, with much benefit.

Case II.—**Sub-acute Pleurisy in a Nursing Woman.**—*History.*—A woman, æt. 26, who was nursing a child one month old, complained of pain, “like stitches,” in both sides, perhaps somewhat worse in the left, especially upon changing position in bed, or making a full inspiration; she also had a short, dry cough. The pain had lasted for two weeks, and the patient has had profuse night sweats. The indications were that the woman was suffering with pleurisy, with serous effusion, and the physical examination bore out the suspicion, so far as the presence of fluid was concerned, for there was absence of vocal fremitus, vocal resonance and respiratory sounds over the left side of the chest as high as an inch above the angle of the scapula; there was also flatness upon percussion over the same region, and the heart also was displaced to the right fully one inch.

Comments.—The occurrence of night sweats under such circumstances should excite suspicion that the material effused is not absorbable, but at the same time night sweats may occur when only serous effusion is present. There is a positive method of determining the character of the fluid present, but it is not proper to resort to it, namely, the introduction of an exploring needle, until certain measures have been employed for its removal. If absorption does not take place, after remedial measures have been employed for a short time, it is proper to tap the chest, and then the character of the fluid will be made known.

The pain of which the patient before the class complains suggests the application of a blister. Wet cups, which the Doctor regards as very efficacious for the relief of the pain of pleurisy, are not warranted in this case on account of the feeble and exhausted condition of the patient. In addition to the blister, which should be repeated within a few days if the pain is not relieved and absorption commenced, some diuretic should be administered—such as the acetate of potash, iodide of potassium, carbonate of potash, with lemon juice, and perhaps one of these might be advantageously combined with desert-spoonful doses of the infusion of digitalis. It is altogether probable that the two indications in this case would be fulfilled by these means; that is, subduing the inflammation by the application of one or more blisters, and causing the absorption of the fluid by increasing the action of the kidneys. When these means fail, it is sufficiently early to arrive at the conclusion that the effusion is purulent or sero-purulent.

Just here, the question arises should the woman continue to nurse her child? Dr. Clark answered affirmatively, for, as is maintained, the secretion of milk actually assists in the removal of the fluid effusion from the chest. Of course, nursing the child would draw upon the nourishment of the mother, but sufficient food should be taken to compensate for that, and the nursing should be continued. Besides, the child is only one month old, and the summer season is near at hand, which are additional considerations for not weaning the child unless it becomes absolutely necessary.

Case III.—Eight Attacks of Articular Rheumatism without Cardiac Complication in a Boy Twelve Years of Age.—His-

tory of the Case.—A boy twelve years old stated that he had suffered from eight attacks of rheumatism; that the first occurred when four years of age, and involved the ankle and knee-joints; that the last occurred during the past winter, lasted six weeks, during which time he was unable to walk except by the aid of crutches; that the duration of each attack had varied from three to six weeks; and that they had confined him to the house and sometimes to the bed. Upon physical examination of the chest, the area of cardiac dullness is normal, the apex-beat is in its normal position, and no valvular murmurs are present.

Comments.—Chronic rheumatism, as a rule, does not produce heart complications, but acute articular rheumatism occurring in a person four years old, is almost certain to give rise to cardiac complication. Why this boy should have had eight attacks of articular rheumatism without having had such complication, Dr. C. was unable to explain, unless by the fact of their mildness. It would be extraordinary for such a number of attacks of fully developed acute articular rheumatism to occur in the same individual between the ages of 4 and 12 years, without leaving cardiac complication.

Treatment.—With reference to the recurrence of the rheumatic attack, if it observed any particular time, it would be well to administer bi-carbonate of soda, in such doses as would leave the urine in the slightest degree acid for, perhaps, two months previous to the time of the expected attack.

ART. VI.—*Therapeutic Value of Certain Remedies.* By H. E. WOODBURY, M. D., Washington, D. C.

Helonias Dioica.—(*False Unicorn*).—This is a remedy that we believe has been too much neglected by the profession. Its use, so far as we can learn, has been confined almost exclusively to eclectics. It is without doubt the best of all the uterine tonics, proving most valuable in all of those diseases that have their origin in atony of the uterus. In all such cases, we order it with great confidence, using it in all those cases of uterine ulceration where local applications are required. The best preparation, probably, is the fluid extract. Of this the dose varies, some of the manufacturers making it stronger than others. Of Tilden's, the dose is from ʒj to ʒij. Of Sharp & Dohme's, from

ʒss to ʒj. It has served us well for many years in the treatment of amenorrhœa, dysmenorrhœa, leucorrhœa, &c. Its administration, in proper doses, is never attended with any unpleasant results.

We ordered this remedy some years since for a lady who was about to leave the city for the summer. She was suffering from endometritis, a case of long standing, complicated with enlargement and prolapsus. We had an opportunity to make only three or four local applications in this case, but enjoined upon the patient the necessity for taking the helonias as directed. Shortly after she left we received a letter from her, asking for the prescription, as she had used all the medicine, and "had never taken anything that benefited her so much," &c., &c. She informed us, on her return from New Jersey, that she had to send to Philadelphia (thirty miles) to get the recipe filled.

In the United States Dispensatory (edit. 1858, pg. iij), a brief reference (of seven lines) is made to this important medicine, taken from the *Boston Medical and Surgical Journal*. This, with a few sentences in Tilden's *Supplement to the Journal of Materia Medica*, is all the literature we have seen regarding it.

In our article that appeared in the *Medical Monthly* for July, 1876, a misprint occurs. We do not use the fluid extract of hedeoma, but the fluid extract helonias dioica, as a uterine tonic. The mistake undoubtedly resulted from the fact, that the hedeoma, or pennyroyal, is much better known than the helonias dioica, the false unicorn.

Sulpho-Carbolate of Sodium.—We know of but two physicians who have used this remedy besides ourselves—an article that we consider one of the most valuable in the entire materia medica. Our attention was first directed to it by an article in one of the journals in 1869. At that time we were treating a bad case of scarlet fever. We tried in vain to procure the sulpho-carbolate of sodium; it could not be found in our city at that time. Before it was received from New York our patient died. Since that time we have had many cases to treat, sometimes 3 or 4 in the same family in succession. In every case the sulpho-carbolate of sodium has been commenced early, and continued until convalescence was assured. Of course this was not entirely depended upon, but the local lesions and other indications were met, as

seemed necessary in each individual case. A brief history of one of our cases may prove of interest.

W. C., aged four years, the child of parents who were of robust constitution was seen by me, late at night, suffering from a burning fever, face flushed, skin dry and rough, pulse 130. Warm teas were freely administered during the night, with spts. ætheris nitrosi. The next morning the eruption was well developed, and a clear diagnosis (scarlet fever) was made. Sulpho-carbolate of sodium was at once ordered, and the bowels moved by a mild laxative. On the third day anginose symptoms of a severe type appeared. The throat was thoroughly mopped *ter in die*, with a solution of potas. permanganat. ʒj to Oj of water, and the patient was ordered to take a little beef tea daily, if it did not disturb the stomach. In accordance with an old fancy, to please the parents, bacon rind was applied to the child's neck. The case proved to be a severe one, as the following sequelæ proved. About the twenty-fourth day the glands on both sides of the jaw began to swell. By the use of tinct. iodini, locally, the swelling on one side was arrested, but finding that the other side was not effected by its application, we poulticed it freely, and when soft opened the abscess that had formed. After the fever had run its course there was such a debility that when the little patient attempted to drink from a cup his hand shook like that of a person affected with palsy. This recovery, though slow, was complete.

In order to form a correct idea of the gravity of a case of scarlet fever, Trousseau, in his *Clinical Medicine*, vol. II, p. 195, says, we must bear in mind the type of the prevailing epidemic. When we treated this case the epidemic was of a severe type, not less than half a dozen deaths having occurred in the neighborhood, while many of those who recovered suffered from incurable sequelæ. Our little patient is, to-day, entirely free from the lesions that so often follow this terrible disease. We say terrible, for before we used the sulpho-carbolate, we confess that we felt unable to cope with it successfully. Since we have been using it we have not lost a single case.

In rubeola we have found it equally efficacious. In one family we had three cases of the disease—a child, its mother and uncle. In the child and uncle the disease was of a mild type. In the mother it was of a malignant character—the worst case we ever saw. Her friends and neighbors called it “a case of black small-pox.” The eruption seemed of a livid color. So

severe was the cough that we feared pneumonia would complicate the case. To our surprise this result was prevented. From the commencement the sulpho-carbolate of sodium was administered, and this, with expectorants, laxatives, &c., carried our patient safely through.

In several cases of variola and varioloid we have had excellent results from the use of this remedy, not having lost a single patient from these diseases since we have been using it.

We would, by no means, give the impression that we depend upon this remedy entirely in these cases; far from it. Yet we use it persistently—believing, as we do, that it acts in such a manner as to materially modify the poison in these diseases of a zymotic type, and aids in the elimination of the poison from the system. Any peculiar symptoms or complications that may arise we meet with such remedies as the nature of the case may seem to require.

As a rule, no unpleasant effects follow its administration, and large doses are well tolerated. An adult may take from grs. xx to 3j *ter in die*. To children we give from grs. x to xv dissolved in aqua cinnamon. They generally take it without difficulty, as the taste is not offensive. If we may base our opinion of the merits of the sulpho-carbolate of sodium upon an experience of over six years employment of it in all of our cases of a zymotic type, we must candidly confess that we believe it to be a remedy of superior value in such cases, one well worthy of a more general trial by all who desire to “try all things and hold fast that which is good.”

912, *Twelfth street*.

Clinical Reports.

Case of Malarial Hæmaturia. By GAVIN RAWLS, M. D., Carrsville, Va.

September 19, 1875. I was called to see J. H., æt. 16, who had been sick for several days, so his father informed me. The patient reports that the day before he had a well marked chill, followed by high fever, which lasted about five hours, when it began to remit. His pulse is now (10 A. M.) 90; skin dry; he

complains of pain in the head—frontal region; slight pain and tenderness over the epigastrium; anorexia; nausea, with thirst; icteroid tint of skin; tongue furred; bowels constipated; urine scanty. Diagnosed remittent fever. To relieve the general torpor and congested state of the portal system, which was shown to exist by the furred tongue and icteroid tint of skin and conjunctiva, I gave the following pill: *R.* Pil. hydrarg. ʒj, ext. colocynth., comp., ʒj, ext. hyoscyami., grs. v. *M.*, fit pil. iv. *S.* Two at bed time. Gave also quinine in anti-periodic doses.

21st. Evening. Pulse 120; cephalalgia, with pain in the back and limbs; great thirst; intense nausea and vomiting, mostly of bilious matter; exquisite tenderness over the epigastrium; bowels moved once or more by the cathartic left previously; patient states he has high fever every evening—the exacerbation commencing about 1 P. M., and lasting five or six hours, when the remission begins. The stomach is so irritable that everything taken is immediately ejected. Directed a sinapism over the epigastrium, and ice internally to allay the intense thirst. Quinia continued in three-grain doses every three hours.

23d. Morning. Pulse 105; tongue furred and red at the tip; gastric symptoms more urgent; patient complaining of intense pain and tenderness, with vomiting of everything taken. Gave lime water and milk, which was immediately rejected. Patient was delirious all night; has passed about two pints of bloody urine; did not examine the blood with the microscope to see if it is pure blood, but I have no doubt that it is blood. By differentiation the hæmorrhage was proven to be renal. Patient says the act of micturition gives no more pain than it did in health; never had any cystic or renal disease in his life. His arms and legs are broken out with blebs about the size of a five cent piece, filled with a yellowish-colored fluid. Icterus now well marked; enjoined that the patient be kept perfectly quiet; diet, ice and milk. Treatment: Sulph. morphia, gr. $\frac{1}{3}$, every three hours, to relieve the terrible pain; quinia continued, three grains every two hours. Desiring the stomach to be kept as quiet as possible, and recognizing the fact that quinine was the sheet anchor, I directed that it should be given by enema, fearing the sharp, cutting crystals of sulphate of quinia might irritate the already inflamed mucous follicles of the stomach. Di-

rected the quinia to be given twenty grains twice a day by enema, but owing to some misunderstanding it was continued by the mouth, and only about half of it was retained each time.

24th, Morning. Condition about the same; has passed about one pint of bloody urine in the 24 hours; has had one operation from the bowels; gastric symptoms unmitigated; was delirious the previous night; did not sleep at all. Treatment: Put a fly blister 4x5 over the epigastrium; directed it to stay on five hours, when it should be removed and dressed; morphia continued; quinia given in 5-grain doses every two hours.

26th, Evening. Patient much improved; pulse 100; has passed urine twice without any blood; skin still yellow; blister acted like a charm; pain and gastric irritability all gone. Cinchonism complete; continued the quinia three grains *ter die*.

27th. Patient still improving; has had no more sign of hæmaturia. Appetite poor; stomach quiet; tongue still coated; has had two operations from bowels—one yesterday (Sunday) and another to-day. R. Pil. hydrag., grs. x; leptandrin, grs. xx; ext. taraxici, grs. x. M., fit pil. x. S. One every fifth hour. Also, R. Ferri redacti, ℥ij; quiniæ sulph., ℥ij; extract nucis vomica, grs. v. M. et fiat in pil. xx. S. One *ter die*.

29th. Patient doing well; convalescent. Skin becoming natural in color; continued the above tonic prescription.

Besides this case, there were five others in the same family down at the same time—four with remittent and one with intermittent fever; but this was the only one in which there was any sign of hæmaturia. That it was due to malaria, I have no doubt.

I do not understand the pathology of the case, I must admit. If there was any anatomical lesion about the kidney, I could not detect it. The patient had not complained of any pain in the lumbar region for two or three days before the bloody urine was passed, nor did he do so either while it was passing or afterwards. I look upon it as a sort of passive hæmorrhage; that under the deleterious influence of the malarial poison, there is anæmia, with general relaxation and breaking down of animal tissue; the blood thus becoming depraved and the animal tissue relaxed, the blood transudes through the coats of the blood vessels at some weak point, which, in these cases of hæmaturia,

happens to be the kidney. We know that in the chlorotic anæmia of young girls, passive hæmorrhage is of quite frequent occurrence, and *cæteris paribus*, I see no reason why such should not be the case in this form of trouble. I do not know what the views of the profession are on this subject, as I can find nothing in any of my text-books (though the latest) on malarial hæmaturia. We know that by a nice anatomical arrangement in the Malpighian bodies of the kidney, the current of blood is retarded to subserve physiological purposes and allow elimination of the liquid part of the urine; now, with the blood depraved and the system contaminated as it is by this malarial poison, is it not possible that physiological action becomes pathological, and this retardation assists the transudation? But let the pathology be what it may, the treatment is the same in this form of malarial disease as in all others—some preparation of cinchona—and for its efficiency, quickness of action and ease of administration, the sulphate of quinia has the preference. The treatment is, I think, another proof that it is a hæmorrhagic transudation. If there was any anatomical lesion about the kidney, oil of turpentine, the usual remedy for hæmaturia, would be likely to prove of more avail than quinine; but is such the case?

Correspondence.

Lister's Antiseptic Method.

Dear Dr. Edwards,—I cannot lose sight of a promise made a long time ago to contribute to your excellent journal, and the leisure that permits me to do so has only now arrived. I am waiting for the Edinburgh train to take me on to London, having broken train to view the Minster and other curious features of this fine old city—one of the most interesting in its antiquities in all England. It is pleasing to note that the preservation of the exquisite old ruins of the Abbey of St. Marys has only been assured for the future through the beneficence of a member of our profession, who left £10,000 to the Yorkshire Philosophical Society. This bequest of Stephen Beckwith, M. D., whose tomb is a prominent object in the north transept of the great

Cathedral, has enabled the Society to improve its botanic garden, and preserve many valuable relics in their fine grounds and museums, which are a chief ornament to the city.

By the kind aid of Prof. Lister, of Edinburgh, I have just been studying the practical working of so-called "antiseptic surgery" in the hands of the masters of the art. The steady advance of this prominent feature in modern surgery, especially its recent adoption by the leading surgeons of Germany—Thiersch, Volkmann and Von Nussbaum, renders it impossible for us to ignore its claims to careful examination, and, possibly, to adoption.

The theory of Lister is based upon the dictum of Pasteur, thus far undisputed, except by Bastian, of London, that putrefaction is due to the presence of microscopic germs. Lister holds that the tendency to putrefaction is the source of most, if not all, the disturbing influences liable to interfere with the process of normal repair after injury, and that these pests of the surgeon—diffuse suppuration, pyæmia, erysipelas, &c.—can be avoided with certainty just in proportion as he can prevent the entrance of putrefactive germs into the wounds under his care. This is sought to be accomplished by Lister by keeping a wound, such as is made by amputation, for example, constantly bathed in a fine, foggy spray from a dilute solution of carbolic acid directed upon it during the operation, and during each subsequent dressing; and also by employing a prepared carbolized gauze, with oiled silk, most carefully applied as dressing afterwards. All this is done with scrupulous fidelity and exactness, for the avowed purpose of keeping out putrefactive germs. If the wound can be kept sweet, the process of repair, he asserts, will go on as nearly as possible as it does in an animal, or, under a scab, in man, *i. e.*, with a minimum of pus formation.

Now, whether the theory thus held be true or not, I am free to say that the results of the practice based upon it are certainly better than those ordinarily attained in surgical hospital practice. In wounds and operations involving large joints I know of instances of repair, even without loss of function, that occurred by this method, which are certainly very exceptional by ordinary methods of treatment. One case, for example, under the care of Mr. Thomas Smith, of St. Bartholomew Hospital,

of a man whose knee was crushed between a railroad car and a platform, the tissues being forcibly abraded and ground away so that the joint was freely opened—a case in which amputation would be usually regarded as inevitable, and which was so regarded by Dr. James Paget, who saw the patient in consultation. Antiseptic treatment in the manner I have detailed was carefully instituted and carried out, with the result of recovery *with good use of the joint*. In another case of gelatinous degeneration of the wrist joint, where there seemed no alternative save amputation, Mr. Lister cut into the joint freely under spray, inserted drainage tubes, persevered with antiseptic dressings, and secured entire recovery with motion.

If space permitted, I could give you examples also of lumbar and psoas abscess recoveries, as a rule, under the persistent use of the antiseptic dressings; pus formations in these cases seem to be arrested, and, coincidently, consolidation of the walls of the abscesses and sinuses follows. The process requires time, drainage and careful dressing; but the cases thus treated get well, whilst under other modes of treatment, the rule is that they die.

Now, it may be, as some assert, that equally good results—which, up to the present time, have not been stated in figures—may be obtained by others without the laborious care which the details of the antiseptic dressing requires. Mr. Collender, of St. Bartholomew Hospital, claims equally good results from his system of “isolation,” with extreme attention to cleanliness. It may be that the results obtained by Lister and his colleagues are accounted for by the sound surgery they employ, and the great care and personal attention they give to their cases. In answer to my question, however, whether the same results would not follow the use in spray of a solution of boracic, or salicylic acid, the same great care in dressing being employed, I was told that this had been faithfully tried, but that “wounds thus treated in a few days invariably stunk.” It has also been asserted in London that the results of surgical operations have improved, and are constantly improving, from other appreciable causes—such as the greater attention paid to hygienic precautions, the greater amount of air supply allowed to patients, and, I may add, above all, to the better nursing since the institution of the

schools for trained nurses. These, my dear Doctor, are questions to be answered in the near future, and their great interest would seem to justify me in thus taking up your valuable space by their mention.

Any one interested in the subject of antiseptic surgery will find a very able review of the literature of the subject, by Dr. Joseph Bell, one of Mr. Lister's colleagues at the Royal Infirmary, in the *British and Foreign Medico-Chirurgical Review* for October, 1875, which is fair and exhaustive; also, Mr. Thomas Smith, one of the surgeons of St. Bartholomew, has published the first of a series of papers on the subject, as the result of a year's trial of it, in a recent number of the *London Lancet*—say within the past two months. This, he tells me, will be continued, and you will find it good.

WM. H. VAN BUREN, M. D.

London, England, June 24, 1876.

Strychnia for Tape-Worm.

Dear Doctor,—I have just read in the June number of the *Monthly*, under the head of Society Proceedings, the discussion in the Richmond Academy of Medicine of your case of tape worm.

More than once in the last few years I have seen in the journals reports of tape-worm being destroyed by strychnia, when this agent has been given for other purposes, and when, indeed, the presence of this worm was not suspected. In case your patient showed signs of the worm again, I think it is worth a trial. For such a case, I would propose:

R. Bitter wine of iron ʒj.
Sulphate strychnia..... gr ¼.

Dissolve the strychnia in a little dilute sulphuric acid, mix and S. One teaspoonful an hour before light breakfast and supper; dinner full meal. In addition,

R. Castor oil..... ʒj
Croton oilgtt. j.
Oil of peppermint..... .gtt. xx.
Mucilage of gum acacia..... ʒj.

M. S. Half of this quantity to be taken on the fifth day, and the remainder in six hours, if needed, to purge.

* * * * *

A. W. FONTAINE.

New Canton, Buckingham Co., Va., July 1, 1876.

[The above is a private letter; but the suggestion seems so well-founded, coming as it does, too, from a friend in whose professional abilities we have the utmost confidence, that we take the liberty of publishing this part of his letter. Since the receipt of the letter, we have had no occasion to test the virtue of the prescription, but we will try it at our first opportunity; in the meantime, should any of our readers use it, we would be glad to have them note the result for the *Monthly*.—EDITOR.]

Specialists in New York, and the Code of Ethics.

Mr. Editor,—It is generally understood here that the specialists of this city intend soon to force consultations with the so-called better class of homœopathists—those who are really somewhat honest, and not wholly scampy and hopelessly tricky—on this ground: That homœopathy, practised in a common-sense way, is a kind of specialty in medicine, or, rather, therapeutics.

A common-sense mode of practising homœopathy is supposed to be: 1st, Giving reasonable doses, not infinitesimal ones, in all cases in which homœopathy is supposed to be applicable. 2d. In all other cases, relying on the treatment most in vogue by regular practitioners. This is not regarded as wholly dishonest, but as absolutely necessary for the benefit and safety of their patients, who always should have the best treatment. It is supposed to prove also that the regular system of practice is making more impression upon the so-called common-sense or rational homœopathists than that funny system is making upon the regular profession. It is assumed, too, that if consultations of the homœopathists with the most eminent physicians and specialists of the regular school were not only permitted but encouraged, these consultations would become so frequent that the public would quickly perceive that in all difficult cases the honest (so-called) homœopathists would always be seen depending upon regular practitioners for their diagnoses and treatment, instead of upon their own half-educated so-called best men.

Some of the most sensible and honest of the so-called homœopathists are regarded as ordinarily good physicians, who are kept out of the regular ranks, which they would gladly join, if they were not obliged to suffer too much humiliation for persisting in a partial belief in their system. The specialists also claim that rational homœopathy is a partial, or, rather, a small fag end of a truth, for *similarity* always pre-supposes some difference. A similar thing is not identical, but only resembles a great deal, and differs somewhat. Hence, a so-called homœopathic remedy cures, not because it resembles the disease for which it is given in its action, but because it *differs* somewhat, and may and must exert an alterative action upon the disease, and may cure it if the dose be strong enough.

Those homœopathists, who always abuse the regular profession, and say that there is no good thing in it, and claim that homœopathy is perfect and most supremely excellent above all other systems of medicine, and yet invariably practise a rude kind of so-called allopathy in nine-tenths of their cases, will not be admitted to fellowship, for they are simply ignoramuses, and may be liars and scamps. The infinitesimalists will simply be regarded as ignoramuses and fools.

But the small class of reasonable, good and honest, who are merely striving to do the best for their patients and for themselves, with or without homœopathy, in certain or many cases, will be regarded as good fellows, and probably good doctors, who are forced into a false position by the rigid rules of ethics which now govern the profession.

With, or without the consent of the American Medical Association, or of the State and County Medical Societies, this thing will be done, or, at least, tried on so hard that the code of ethics will be strained very tightly, and may have to give way. A heavy struggle will soon come on in the profession, and some of the best surgeons, oculists, aurists, dermatologists, &c., in New York will soon move in this matter. Others who really sympathize with the movement will look on quietly, saying that the Michiganders and other ganders are making geese of themselves, or something worse; but it is not their business or inclination to tell them so, or bother themselves about them.

SPECIALIST.

Original Translations.

From the German and French. By WM. C. DABNEY, M. D.,
Charlottesville, Va.

Operative Treatment of Pleuritic Exudations.—By Dr. C. A. Ewald, of Berlin.—During the last fifteen years, Dr. Ewald has been collecting material in Frerichs' clinic, with a view of determining the value of the so-called operative treatment of pleurisy. Since, however, his observations have been confined to pure, uncomplicated cases of pleuritis and pleuro-pneumonia, the absolute value of his observations is materially lessened. Yet this meagreness is counterbalanced by the greater certainty with which a definite conclusion can be reached. With a total of 204 cases of serous pleuritis, he gives for those which were not punctured a mortality of 5.12 per cent.; while in those where puncture and withdrawal of the fluid was practised, the mortality was *nil*. The harmlessness of the operation of puncture, when practised with proper care and not too early, namely: not before the end of the fourth week, is shown by the surprising results before us. (Dr. Ewald's figures should not be considered a fair exponent of the results of thoracentesis.)

In *L'Union Medical* for the 5th of October last, a case of pleuritic exudation, in which the effusion was removed by the aspirator, is recorded by Dr. A. Legroux, where death occurred from syncope three-quarters of an hour after the operation. A somewhat similar case occurred in the practice of Dr. Raynaud, at the Lauboisein Hospital some time since (which was reported in the *Virginia Medical Monthly* for March last.—W. C. D.). Dr. Ewald pleads for the syphon method proposed by him, and the complete disinfection of the instrument. He treated 46 cases of suppurative pleuritis, with the following results: The "general" rate of mortality amounts to 56.62 per cent.; after puncture or incision, it is 54.28 per cent.; when only internal treatment was used, 63.63 per cent. In these cases, however, where incision was practised, empyema was caused; and if the cases treated by puncture and those by free incision be separated, the mortality of the former will be found to be 50 per cent., while that of the latter is 55.17 per cent. A similar result was observed with reference to the duration of treatment in those cases which did not terminate fatally. The relative length of time before recovery after puncture and incision was as 5.7 to 6.3. The effect on fever, the frequency of the pulse and

respiration, was in keeping with the views commonly held on this subject.

Malignant Lymphoma and Lympho-Sarcoma, with Special Reference to their Treatment.—By Dr. A. Winiwarter (*Arch. f. Klin. Chirurgie*, XVIII Bd., I heft).—Winiwarter characterizes malignant lymphoma as a hyperplasia of the lymph glands, with characteristic persistence of their structure and progressive enlargement. By lympho-sarcoma he understands the primary development of sarcoma in a lymph gland, and endeavors to draw a sharp line between both varieties of tumors, both clinically and anatomically.

With reference to the treatment of malignant lymphoma, he lays great stress on the action of arsenic in the form of Fowler's solution. He uses this drug as an injection into the tumor, and at the same time gives it by the mouth. This method of treatment, he says, has acted admirably in many cases. A man with a tumor on the neck, not suitable for operation, was completely cured by it. The patient begins with five drops of Fowler's solution internally; adds one drop every three days up to thirty, and then decreases in the same way. At the same time, one drop of a pure Fowler's solution is injected daily. The paroxysmal growth (*Rückbildung*) of the tumor is always accompanied by fever. The manner in which the arsenic acts is not very clear; but there can be no doubt that it does good service.

Relation between Alterations of the Liver and Modifications of the Proportions of Urea.—M. Charcot delivered a lecture on this subject a few weeks since, which, like all of his productions, is highly interesting and instructive. We propose to give a brief abstract of this lecture, which is reported at considerable length in *Le Progrès Médical* for June 3d last.

M. Charcot commences this lecture by referring to the observations of the late Dr. Parkes, made thirty years ago in India, that in the hepatitis peculiar to that climate the amount of urea is sometimes increased and sometimes diminished. An examination of Dr. Parkes' cases showed that in those cases where the amount of urea was increased there was simply an inflammatory hyperæmia of the liver, while in those cases where the amount of urea was diminished, the parenchyma of the liver had been invaded by a very large abscess, and Dr. P. states that the diminution in the amount of urea was directly proportional to the amount of the abscess and the amount of secretory tissue involved. A few years ago, Dr. Parkes had an opportunity of studying this subject in a case of hepatic abscess occurring in England, and he observed that in spite of the existence of fever and continued nourishment—two circumstances

which generally increase the amount of urea—it was, in this case, very materially diminished. In lead colic (during which M. Potain has found that the liver is materially diminished in volume), M. Bernardel has thrice observed the amount of urea descend to three grammes during the attacks, while in the intervals the amount was twelve or thirteen grammes. M. Bernardel contends, furthermore, that the alteration in the liver in animals caused by the repeated injections of phosphoretted oil (diffuse granulo-fatty degeneration) causes a diminution in the amount of urea. M. Bauer has, however, obtained contrary results under similar circumstances. Of one fact, however, there can be no doubt: that in spite of the elevation of temperature, there is a diminution in the amount of urea secreted in certain grave febrile affections—such as variola, typhoid or typhus fever—when diffuse fatty degeneration of the liver, so common in such diseases, supervene. Thus, in a patient suffering from hæmorrhagic variola, when the temperature was 40 to 40.5C., M. Bernardel found the amount of urea was 4 gr. 3 and 2 gr. 8. Murchison has found the same thing to hold good of typhus and typhoid fever, and he attributes the decrease in the amount of urea in these cases to a diffuse degenerative alteration of the hepatic parenchyma. He thought the diminution in the amount of urea was, in some measure, compensated for by the presence of leucine and tyrosine.

But it is especially in acute yellow atrophy of the liver that the diminution in the amount of urea is striking. It is well known that the lesion proper to this affection consists in a rapid destructive alteration of the hepatic cells over the whole extent of the liver. We are indebted to Frerichs for the knowledge of the remarkable alteration which occurs in the urine after, and in consequence of, acute yellow atrophy of the liver. This alteration consists in a very marked diminution in the amount of urea and uric acid, and also in the sulphates and phosphates, while leucine and tyrosine make their appearance in the urine in considerable quantity. Frerichs was, however, mistaken in thinking this condition of things peculiar to acute yellow atrophy of the liver. Murchison found the same thing to occur in typhoid fever, and Harley, in a case of abscess of the head of the pancreas.

We come, in the next place, to study a group of hepatic affections in which urea diminishes temporarily in the veins at the same time that leucine and tyrosine make their appearance in them. First among these affections may be mentioned a peculiar form of symptomatic intermittent fever. It is frequently called now-a-days *hepatic intermittent fever*. In the majority of

these cases, there is obliteration of the biliary passages, either by a calculus or some other cause (such as cancer of the head of the pancreas, &c.), and retention of the bile is thus caused. The hepatic canals are dilated, and at the same time present the signs of pronounced inflammatory irritation (angiocholitis). The hepatic parenchyma becomes, in this manner, more or less seriously altered. The febrile attacks do not come on with the almost mathematical regularity which is observed in common intermittent fever, but the rises of temperature are still very decidedly marked (40° to 41°C.); there is great chilliness, and frequently symptoms suggestive of a pernicious nature accompanying it.

M. Charcot states that he has been induced to the belief, and he endeavors to justify himself in this hypothesis, that this hepatic intermittent fever has its point of departure in a peculiar intoxication, caused by the development in the biliary passages, filled with stagnant and completely altered bile, of a special "pyretogenic" substance.

Although most of the symptoms of common intermittent fever and hepatic intermittent fever are so much alike, there is one point which distinguishes the hepatic form, not only from simple intermittent fever, but also from that which so frequently occurs in tuberculosis and other affections. The important point of distinction is this: that while in simple intermittent fever and most other forms of this affection the amount of urea discharged is increased during the paroxysm, in hepatic intermittent fever it is invariably diminished. As an example of this, a case may be mentioned, reported to the Société de Biologie in 1873 by M. Régnard. The patient was a man 68 years old, who had never had hepatic colic, but who had suffered for some time from jaundice, and whose liver presented a decided increase in volume. The characteristic clinical feature was an irregular intermittent fever, which had lasted nearly three months. At the autopsy, the liver was found very large, and of an olive color. The bile duct was obstructed by a large calculus. The bile had certainly continued to pass into the intestine. Every five or six days at farthest, there was a very marked elevation of temperature—the thermometer standing at 40° or 41°C. , while in the interval it stood at 37° . By comparing the two tables showing the amount of urea discharged, and the temperature of the patient, it was observed that whenever there was an elevation in the temperature, the amount of urea was decidedly diminished. This, as previously remarked, is precisely contrary to what holds good in other forms of intermittent fever. With a temperature of 37.4°C. , in hepatic intermittent fever, the amount of

urea discharged in 24 hours varied between 14 and 20 grammes, while, when the temperature was 40° , there was only 7 grammes of urea. It is important to notice, however, that when the urea was diminished in quantity, leucine and tyrosine made their appearance in the urine.

M. Charcot then proposes the following explanation of this fact: The liver, which is the principal source and focus of urea in normal conditions, increases its action during febrile conditions, but without deviating from the normal type; and in this way a larger amount of urea is excreted. This holds good so long as the hepatic parenchyma is healthy; but when alterations of structure occur, the scene changes, and under the influence of the excitation caused by the action of the pyretogenic poison, the process of dis-assimilation is increased, as in the preceding case; but the products of this dis-assimilation are imperfect. Urea is produced in small quantity, and in its place are formed substances lower in the series of nitrogenized bodies, such as leucine and tyrosine.

(This interesting paper of M. Charcot will, we are convinced, be read with interest by the numerous readers of the *Virginia Medical Monthly*. The process for estimating the amount of urea in urine is so simple, and requires so little apparatus, that it can be done by any practitioner without difficulty, and there can be no doubt that it would throw much light on many affections which would otherwise remain very obscure.—W. C. D.).

Proceedings of Societies.

EASTERN [NORTH CAROLINA] MEDICAL ASSOCIATION.

The Association met in the City Hall, in Wilmington, December 7, 1875, President Dr. H. O. Hyatt, of Kinston, presiding.

Many members were absent, probably from the fact that they were distant from the railroad and had very unfavorable weather for traveling. A sufficient number were present, together with the newly-acquired members and visiting brethren of the city, to make the meetings quite a success.

The following physicians were in attendance: Drs. H. O. Hyatt, P. W. Woolcy, H. W. Faison, W. H. H. Cobb, V. N. Seawell, M. E. Robinson, W. L. Best, S. S. Satchwell, Frank Duffy, W. C. Murphy, W. T. Ennett, and S. B. Flowers.

The Committee on Membership recommended the following gentlemen, who became members of the Society: Drs. J. D.

Roberts, M. J. DeRossett, Thomas F. Wood, R. F. Lewis, Calhoun Hill, J. L. Nicholson, K. J. Powers, Jas. F. Newell, J. H. Bellamy. The new members were nearly all present.

Dr. George G. Thomas, in behalf of the profession of Wilmington, delivered the following address of welcome, to which Dr. H. W. Faison, in behalf of the Association, responded:

Gentlemen: It is always a pleasure for earnest men, eager in the pursuit of an object, worthy of their highest endeavors and best thoughts, to welcome those who will, and do work with them to attain the great end they are striving for. As such allies in our struggle with the great enemy, death, and the cohorts of diseases that are ever ravaging the fair fields of health under his generalship, we greet you, feeling assured that you come to us laden with experience and close observation, rich in new ideas to aid us in our efforts to promote the best interest of that profession, which is second in importance to none, and yields to the church and her ministers only a higher claim to sanctity.

To labor is the lot of man; and if he accepts his lot with a spirit becoming his manhood, and, as far as in him lies, performs the duties that daily, even hourly, claim his attention, then is rest at some time a necessity, that both mind and body may renew their spirit forces; and in the newness and fullness of life and vigor, enable him to work out his portion, whatever it may be. It is to this rest that we welcome you—but rest is not inertia—that death in life which paralyzes the energies, steepens the mind in idle, useless thoughts, and deprives the brain of its claim to being the seat, if not the source of the intellect. This rest will call forth your best thoughts, but only thus to serve as a recreation.

You are assembled here to unburden yourselves of the facts which have accumulated in your practices; to aid, as far as each may be able, in bringing to light the great mysteries, so deep hidden in the uncertain workings of the human body. If you have wisely and carefully digested the phenomena of disease, as you may have seen them; if you come with your budgets filled with new thoughts or facts corroborative of the settled principles of our science, or of those many theories, that as yet are but faintly set forth; if you, old and young are prepared to help each other, the seniors with the mature judgment, which long acquaintance with disease will give, and the juniors, with the energy and fire of youth, both together to act and react for mutual good; if you will always patiently hear the other part, giving due consideration to every one; if you will be generous with your knowledge, be it much or little; if you will steadily and persistently work here for the good of our profession by this

general barter of ideas, and through this means, benefit the general public; if you will only let your discussions be on medicine, and not that very ill-defined thing called 'Medical Ethics,'—the hobby of men, whose minds have long since lost the proper balance as physicians—this will be a season of refreshing rest, and to such a one do we welcome your assembly.

Let us be both teachers and disciples; and in telling of the lessons learnt in the sick room, let us aim to be clear and concise as teachers, attentive and discriminating as disciples; for, after all, thus is made up the great whole, which we call medical science. The accretion is as slow as that made by the insect which builds up the coral world; but it is the sum total by which we must measure the expenditure of force. It is the many springs and streamlets hidden away in the hills, that by accumulation make the deep and silently flowing rivers. So do great truths flow in gradually from many sources, until their fullness is developed.

"Science moves but slowly, slowly, creeping on from point to point." The whole must consist of parts, and this consistence requires nice adaptation of components. You are among the builders of a great structure, that oftentimes seems destined to be a Babel. But let it be with you as among those workmen whom the Great King united into one organized body of masons, so laboring that all aid shall be mutual, that emulation shall be without strife, and that the work shall be more surely done, because the more quietly performed. May yours and ours indeed be,

"The mission of genius on earth! To uplift,
Purify and confirm by its own gracious gift,
The world, in despite of the world's dull endeavor,
To degrade, drag down and oppose it forever.

The mission of genius, to watch and to wait,
To renew, to redeem, and to regenerate,
* * * * * to nurse,
And to soothe, and to solace, to help and to heal
The sick world that leans on you."

I have presumed to offer these thoughts, which were suggested by the welcome I was bidden to offer you.

If I apprehend aright the object of this convocation of physicians, it is to compare the observations that may be given you by others from their experience, for your reflection; but to record only those thoughts that will serve as guide posts in this journey towards the goal to which the science, we are striving to promote, will eventually lead us. I have said that under these favoring circumstances, this will be a season of rest, and to the busy worker, rest is recreation. The mind toils not, when its only task is to draw from memory's stores such things as are to benefit others, or by a sort of friction (to indulge in another

simile), draw forth a spark from another mind. The thinking has been done, the weary watching is over with, the issue in many cases has been reached, and you will only be left the duty now to give the results of the hours, days, and it may be years of patient toil. It is for this rest, then, that we heartily receive you; but this will only faintly tell the story of welcome. For to the hospitality of the profession, such a welcome we extend you as only a doctor can offer his 'brother chiefs.' I am assured I speak the feeling of our physicians when I promise you that though we are not members of your organization, our doors will stand open to you, and our best wishes be always with you, and we will feel it is well that we have met together. May these days of your stay amongst us be as were the hours noted by the old Venetian dial, which marked only those that were serene; and may the memory of your visit to our city, be always worthy to be denoted by the mark of the white stone. Gentlemen, again and many times again we welcome you.

The following papers were read, some of which created much discussion: "The Physiological Action of Quinia," by Dr. Chas. Duffy, Jr., read by Dr. Frank Duffy (see page 326 of this No.); "Treatment of Cystitis with Warm Water" (report of a complicated case), by Dr. M. E. Robinson; "Puerperal Convulsions and Spontaneous Evolution," by Dr. H. O. Hyatt; "Diphtheria," by Dr. W. T. Ennett (see page 332 of this issue).

After the reading of this paper, Dr. M. J. DeRossett, of Wilmington, N. C., said that the subject of **Diphtheria** has been so exhaustively treated in the various text-books and in numberless monographs, that were it not for the continued very unsatisfactory condition of its therapeutic relations it would seem a waste of time to prolong its discussion. The history of Wilmington, however, for the past year bore witness to the importance of eliciting all that can be said of this terrible disease, and if some of us can present any new mode of treatment, it may still be profitable to have our minds refreshed with what is already known. I rise, therefore, to express my pleasure at the earnestness of manner in which the gentleman has so ably presented his paper; and although, on *a priori* grounds, not pursuing myself the measures known as the Hartford treatment—namely: the external use of fat bacon—I must say that it possesses the same unproven efficacy that almost every other method yet suggested must claim.

There are a few theoretical considerations only which it is my purpose to present, and I regret that they must bear the marks of crudity which characterizes all unfinished work. I think our present epidemic has so far exhibited no features or phases which

in the variable nature of diphtheria have not already been well described; nor do I think we have very widely departed from the average mortality, notwithstanding the various lines of treatment pursued.

Of the cause of diphtheria nothing is known. The malarial theory is untenable, and the supposition that dirt, dampness and privation stand in any genetic relation to it, is an assumption without proof, and one against which so much may be urged in refutation that it is manifest these conditions can at the utmost do no more than favor the development of the disease, or offer, in the case of dirt and dampness, a nidus for the specific poison. That it is an essential disease, we cannot doubt, capable of communicating itself under circumstances, of which a tolerably close proximity is the chief, and possessing a germ or communicable principle which may remain long dormant without losing its zymotic power.

The local manifestations in the pharynx, the usual location, (though cases occur in which that part remains free from disease) have, in my opinion, been invested with a significance and assailed with a vigor of treatment which their importance does not call for. This will be more clear when we come to consider the nature of the morbid product and the general indications for treatment.

The *diagnosis* of diphtheria can seldom be a matter of difficulty, for, although quoad its general symptoms, it has nothing to characterize it, yet its anatomical features are usually sufficient to indicate it without fail. It has been suggested here that there is an allied disease to which the name diphtherite is assigned, between which and true diphtheria, except from the violence and perhaps fatal issue of the one, and the mild nature of the other, no differentiation is to be made. I think it is wiser to speak of them as mild and severe forms, always assuming that simple pharyngitis has not been confounded with diphtheria proper. Some other pharyngeal and some buccal affections may, without due care, be mistaken for diphtheria, and *vice versa*. Muguet, for instance, presents dots and plaques of pathological structure in some respects resembling the pseudo-membrane of diphtheria. But if we remember that the exudation of muguet consists almost wholly of a few low vegetable forms, like *oidium albicans* or *penicillium* or *leptothrix*, with a few epithelial cells, the microscope, even with moderately low powers, will distinguish it from the abundant cell formation and fibrillated appearance of true diphtheritic product. Diphtheritic membrane, it is true, like all low organisms, offers a nidus for fungoid growths; but these are elements superadded to the original features which

still remain, and do not usually make their appearance until time and other circumstances render the diagnosis no longer doubtful.

Nature of Diphtheria.—Is diphtheria an inflammatory disease? If we consider an inflammatory disease one which, in some part of its course, is *invariably* characterized by febrile symptoms (frequent and quick pulse, arterial tension, elevated temperature), we must answer this question negatively, for cases frequently occur in which no sign of these appear. The present state of our knowledge only enables us to say that it is an essential disease, in which there is marked cell disturbance in the blood *probably*, and in the seat of its local manifestations. There is the closest analogy, both general and special, between it and hospital gangrene, particularly that form in which the granulations of the wound are covered with a yellowish membranoid pulp. The local symptoms which, in all but exceptional cases, appear in the pharynx, or parts contiguous, are too often held to be the cause of the general affection. They are but symptoms adding in some, though not the majority of cases, to the gravity of the disease, and having their seat of election from causes of which we are entirely ignorant. But this is not strange, for the same must be said of very many diseases: witness the exanthems and the apparently arbitrary locations in verrucous and furunculoid affections, &c.

The local symptoms, in their initial stage, may or may not be of an inflammatory nature. In the pharynx, for instance, the mucous membrane may in color be red, natural or pale; it may be doughy or of normal resistance to the touch; swollen or not. The membranoid exudation appears in dots or plaques, not as covering an ulceration, but upon the surface of the mucous membrane; or, if the cellular tissue and parts subjacent are infiltrated with serum, it may lie in a depression. A point of prime importance is, that it does not arise from or begin in an ulcerative process, or in any follicular obstruction or swelling. This white or yellowish membrane is a true exudation from the capillaries directly upon the surface of the mucous membrane, and consists of protoplasm or white blood-cells, and coagulated serum. Since the physiological discoveries of Cohnheim, Von Recklinghausen, and others, we may be sure that it is not the product of endogenous multiplication of the epithelial cells of the part. The white blood cells migrate directly from the vessels of the capillary circulation, and by partial conversion into fibrine, give the characteristic features which I have described. Mingled with these are found exuviated epithelial cells in various stages of existence. If this membrane is torn off, it usually shows a bleeding surface

beneath, because so intimately united with the parts by the coagulated serum which has been poured out in the cellular tissue and on the surface, where it forms the amorphous albuminoid element of the membrane itself; and whether torn off or dissolved off, it usually speedily returns so long as the course of the disease keeps up the migrating tendency of the white blood-cells, or the circulation of the part is such as to permit their migration. This view of the nature of the local process seems to me to promise some results in negating or indicating a line of treatment, and I shall mention that which it has led me to in a few moments.

I need not refer to the ulcerating, sloughing, and gangrenous processes which mark some cases, except to say that they are never essential features of the disease, but are due to death of the part in which the circulation has been destroyed by excessive infiltration. Nor need I dwell upon the tumid and tender glands, which are so prominent in the picture of the disease; for swelling of lymphatic glands is always associated with morbid cell activity; whether as the seat of their multiplication or as the receptacle of resorbed products arising from them, I do not know.

Treatment.—I shall not discuss the many modes of treatment laid down in the books, and pursued in the most routine manner by nearly all of us. We know well that we have no specific for this disease, and that all lines of medication and management yield average results. Still, we should strive for something better; and it is legitimate, after due consideration of the indications to be fulfilled, to take up tentatively whatever promises to meet some of them. What the indications are from my point of view is perhaps now manifest from what has been said. Securing proper elimination, alcoholic stimulation affording nerve force, and maintenance of proper hygienic conditions, whether in prophylaxis or therapeutics, are incidental measures to be regarded in the care of all patients. Specially of diphtheria, we are ignorant of the morbid causes, and, consequently, of any neutralizing agent. We know, or, at least, assume, the presence of a material of a zymotic nature, capable of making an impression upon the fluids of the body, whether by its own multiplication, by the induction of morphological changes there, by setting up a disturbance in the ordinary processes of nutrition, or by creating differences in the quantity or action of protoplasm. And we seek remedies which are supposed to have a destructive or limiting effect upon that zymotic power.

My own reflections have led me, after many trials with other agents, to the use of the sulphide of calcium, the efficacy of which in furunculoid disease we learn from Dr. Sydney Ringer.

Upon purely *a priori* grounds I should deem this substance useful in zymotic affections generally. I have, in a number of cases, used this agent with sulphate of quinia, in pillular form—the usual prescription being from $\frac{1}{4}$ to $\frac{1}{2}$ grain of sulphide of calcium and one to four grains of quinia every four hours. The pills have a strong odor of sulphide of hydrogen. The free use of quinine is suggested for several reasons: Its anti-febrile power; its toning influence upon nerve; its equalizing effect upon the circulation; *its marked antiseptic nature; its power in limiting amœboid movements and the emigration of white cells; and last, though not least, its influence on the fifth pair of nerves, which preside over the nutrition of the parts usually affected*. So far, my experience with these has been very favorable, but too limited to enable me to determine whether they have a higher therapeutic value than the usual remedies. Their use does not preclude the simultaneous use of other drugs, and I have used the tincture of guaiacum quite largely, and, I think, always with local benefit.

And now to the much disputed question of topical applications. When the strength and tractability of the child will admit of it, these should be made in the interest of cleanliness, so that the dangers of putrefaction may be obviated. But I fail to see any benefit in the use of caustic and highly stimulating remedies. They seldom succeed in bringing about a change in the active cell exudation by which the membrane is formed; and if we succeed in keeping the parts free of membranous matters, the general disorder is not cured. In cases that can be well managed, perfect cleanliness, by the syringe or by gargles, is very desirable, and *lightly brushing over the entire surface with an acid solution of quinine*, say grs. xx, to $\mathfrak{z}\text{j}$ of glycerine, eight or ten times a day, seems to act beneficially. We have already spoken of the various properties of quinine in reference to this affection, and it may be well to add that its favorable influence is greater if applied to the part denuded of the exudation. The nasal douche, which has been alluded to, can seldom be used, and aural surgeons are coming to regard it as a dangerous instrument to be carelessly or improperly handled.

A word in regard to tracheotomy in cases where laryngeal implication threatens suffocation. Whenever it is determined that the exudation has begun at the glottis, and has already introduced a new element into the respiration, we should remember how contracted is the windpipe of a child, and how completely it may be blocked up in a few hours. Then is the time for prompt action, and if the almost certain death of the patient is to be averted, we must not delay to operate. State clearly the

conditions and chances to those interested, but do not put off the responsibility upon them to decide if it shall be done. What are we there for but to assume responsibilities? Operate early before the strength flags, and while mild anæsthesia may yet be used to facilitate the operation. Cut deliberately and slowly, entering the trachea through two or more rings, instead of at the crico-thyroid space or through the cricoid, as this bone may subsequently undergo necrosis from the irritation of the tube.

One of the most remarkable features of this disease is the supervention of paralysis after the recovery of the patient. Fortunately, it is seldom a very grave condition, since, under strychnia and electricity, almost all are restored; but, from a purely pathological point of view, it is of the greatest interest. No satisfactory explanation of it has ever been offered, and I almost hesitate to advance another theory, feeling that it may also be set aside as untenable.

Diphtheritic paralysis may follow any case, and its severity has no relation to the severity of the disease—mild cases exhibiting severe forms, and severe cases often showing no paralysis whatever. It ensues usually from several days to several weeks after convalescence has set in, coming on gradually, and attacking any part of the muscular system. Now, what is its cause? An effort has been made to connect it with albuminuria, but the disturbances of innervation following diphtheria resemble in only one respect those of Bright's disease, viz.: the amaurosis met with in each. But even this goes to disprove the analogy; for the dimness of vision in diphtheria is the result of paralysis of the ciliary muscle, while that of Bright's disease is due to changes in the retina. The theory maintained by Trousseau that it is due to the general poisoning of the system by the morbid principle which produces the malady, is not satisfactory, for this should be more strongly operative early in the disease; it should effect almost the whole muscular system, instead of selecting out a few individual muscles; or, if it had a special relation to one or more, it should always affect them to the exclusion of others; and the severe cases should always exhibit the greatest amount of muscular disturbance. The explanation is a pure hypothesis, founded on nothing but the negative results of coarse autopsies, in which no changes were revealed in the encephalon or spinal cord. Now I hazard the opinion that if careful and minute search were made in cases which die of diphtheritic paralysis (and they are rare), changes sufficient to account for the paralysis would be found. This supposition is certainly more in accord with the present state of neuro-pathology, which is not satisfied to attribute the paralysis of any one muscle to

the general blood condition, but looks for the cause in appreciable histological changes at the source or in the track from or through which the innervation is derived. No other explanation can be satisfactory. It might be supposed that the action of atropia in producing paralysis of the terminal branch of the 3d nerve, supplying the iris and ciliary muscles, disproved this ; but not so. Atropia always affects the same muscles, while the diphtheritic influence varies greatly. We must seek the cause of muscular paralysis in diphtheria in appreciable, though perhaps very minute, changes at the central origin of the nerve. These are induced by *minute embolisms*, which form in the blood at a period when its condition is most favorable thereto, and being whipped off in the circulation, are finally lodged in a terminal vessel in the cranium, most frequently through the middle cerebral artery. If a single well-authenticated case of embolism of the central artery of the retina were discovered as a sequel to diphtheria, this theory should be considered as established.

This theory also responds to the requirements of the gradual development of the paralysis. An embolism obstructs the circulation in a minute cerebral centre, which then begins to fail in supply of nerve force. As the nutrition of this centre becomes more and more affected, the muscle loses power, and, as the focus of softening extends, the palsy becomes more or less complete. Fortunately, the area of softening is limited, and after repair sets in, the muscle regains its nerve supply, and is restored.

Dr. Thos. F. Wood, of Wilmington, was called on and made the following remarks on the subject :

The etiology of diphtheria occupied my attention more than usual during its prevalence here last season. From my observations, I have come to regard diphtheria as essentially due to bad drainage, impure water, insufficient and unwholesome food, and all such kindred causes as are capable of producing zymotic diseases. This theory has been met with the counter opinion from some of my confrères that they had seen the disease in its most malignant form among children of the wealthy, whose surroundings were of the best sort. I am willing to admit all this, and still hold to the opinion, for the reason that in diphtheria, as in all other diseases dependent upon morbid germs, that the starting point of the invasion is generally in the hovels of the poor. Once getting a foothold there, it gathers intensity enough to spread to the more healthy localities.

Still fresh in my memory is the outbreak of this disease in 1874. In one family, a very malignant case made its appearance in the person of a little boy about ten, who had been

troubled some months with a bullous eruption on his legs. His case was rapidly fatal. His death was soon succeeded by that of his sister. In each one of these cases there was this bullous eruption, and a well marked diphtheritic pellicle forming wherever there was an abrasion. Two older children took it, aged respectively about 11 and 13, who recovered, but after a long convalescence. So malignant was the disease in this house that I inspected the premises, and found the well in close proximity to the privy-sink, so that the water from the well, when left standing a few minutes, emitted a stercoraceous odor. The family removed from the premises, and the remainder of the family soon recovered. In many other families—some in better, some in worse circumstances—essentially the same conditions obtained, together with superadded personal uncleanness, insufficient food and bad living.

It would seem, though, to some, if I am so clearly convinced that bad drainage, impure air and water, and such other conditions, are potent to produce diphtheria, that I should be able to show why, in some cases, typhoid and cholera are produced by the same causes. I am clearly convinced of this origin of zymotic diseases, and believe that microscopic research will one day reveal to us points of distinction between these disease germs, although the solution of this problem is a long way in the future.

It is well to dwell upon the etiology of diphtheria, because from this source, and from this alone, are to be deduced the means of overcoming this disease. It is in the means of prevention that we must rely, because our remedial agents have all failed in the severer forms of the disease. When we learn the science of hygiene, and are enabled not only to teach it to the public, but are possessed of the means of enforcing its laws, then we will accomplish more than is possible now by medical treatment. This very desirable era is, too, in the distant future, so that, in spite of use, we come face to face with the question, What is the best way to treat diphtheria?

But before I speak of treatment, I would like to say something about prognosis. In this, as in all other diseases in which mortality is great, we are frequently questioned by anxious parents about the probable issue of the case. All cases are grave, and a guarded prognosis should be given when diphtheritic pellicles form on abraded surfaces on distant parts of the body. A fatal termination may be looked for when the disease *first shows itself* in the nares, and nearly the same when it extends into the nares from the pharynx. Favorable change should not be promised, in the mildest cases, before the 12th day, dating from

the first appearance of the diphtheritic deposit. Nose-bleed in the second week denotes rapid changes in the blood, and is almost always fatal. A slow pulse, falling from above a hundred, as I have seen it, down to 48 or 50, is also a hopeless condition—a condition from which no amount of stimulation possible has been successful. These are some of the more prominent prognostic signs which occur to me now, but there are others which I could speak of in a time of more deliberate leisure.

The treatment can be compassed in a few words. The obstacle which stares us in the face and paralyzes our efforts from the beginning, is the greatest of all difficulties, viz.: the unmanageableness of children. It is hard to see the throat of the most docile of them, and it is harder still to get them to take either food or medicine. This difficulty increases as the glands in the neck enlarge, until nothing but force avails to make the patient swallow. I have often thought that the widespread sin of disobedience was at the root of this resistance, and have repeatedly, in the advanced stage of the disease, forced quantities of liquid nutriment into such children, and nearly every time it was vomited; so that now I know that sometimes at least their apparent obstinacy is a product of the disease. To name every drug recommended as a sure cure for diphtheria would take one better versed in pharmacology than myself. I am inclined to believe, however, that all harsh applications to the throat are useless, and I would mention particularly nitrate of silver, muriatic acid, and even tincture of iron. Even should these destroy the membrane in the throat at once, until the diseased condition of the blood is overcome, it would form again in a few hours. The tonic and supporting plan, with tincture of iron and quinine, is, after all, as good as any. To accomplish the best ends, though, small doses of the tincture should be given in glycerine and water. A continued use of large and strong doses eventually nauseate the patient. I have dosed patients with salicylic acid when there was quite a rage for it, and when, as a pharmaceutical novelty, it was very expensive, but it was entirely inert, as far as I could see. When the patient refuses food, or is in a passive state and allows it to trickle down his throat, in the first instance he must die by asthenia, and in the second case he is very likely to die from the same cause.

I am persuaded that the remedies that are so much lauded by some would not stand the test of more extensive observation. Encouraged by success in treating this disease when it prevailed in a mild form, they have hastened to the public and medical journals with their successful prescriptions only to be stung with chagrin by the failure of the same remedy when they had to deal with the severer form.

In conclusion, I would say, having determined that your case is diphtheria, avoid all unnecessary attempts to examine the throat, or to make applications to it. Teach the patient to gargle, and rely upon some simple astringent solution. Allow as much ice as the patient can swallow, and apply a wet handkerchief to the throat, covered by a dry one, and renew it every hour. Give ten drops of tincture of iron, ten of glycerine and one grain of quinine, diluted with a tablespoonful of water, ever two hours. Milk punches and beef tea, made by scraping the tender parts of the beef to a pulp and boiling it for two hours, should be given alternately every two hours day and night. The use of medicated atomized spray, by means of a steam atomizer, is very grateful to the patient, and does good. In no disease is officious intermeddling, and trying this, that and the other medicines more productive of harm. We need more light, and until it comes we are bound to urge sanitary means for the prevention of diphtheria.

Among other papers presented were the following: "Fever, their Treatment, etc., Laudanum Poisoning in a Hysterical Case, and Removal of a Tumor," by Dr. W. C. Murphy; "Use of Pepsin in Nausea and Vomiting of Malarial Fevers," with illustrative cases, by Dr. Frank Duffy (see page 336 of this issue); Oral report of a "Case of Dislocation of Shoulder Joint in an Aged Woman, and Reduction after Two Years' Standing," by Dr. V. N. Seawell; and oral report of a "Case of Distortion and Contraction of the Pelvis, Necessitating Cæsarian Section," by Dr. H. W. Faison; "Intermittent Neuralgia," by Dr. W. K. Best.

Dr. W. H. Cobb, of Goldsboro, read the following report of a case of **Stricture of the Urethra Treated with Laminaria Digitata Bougies**.—In the latter part of May, 1875, I was called to see a patient, aged about 25 years, married, whom I found suffering with a single organic stricture of the membranous portion of the urethra, one inch long. The history of the case, as related by my patient, is as follows, viz.: When about 12 years old he contracted gonorrhœa. Being a very modest youth, he feared to seek medical aid from his family physician; but after allowing it to become chronic, he applied to an old negro root doctor, who dosed him thoroughly with root and herb teas; but failing to be benefited, after several months' trial, he gave up in despair. Some years since he married, but prior to his marriage he observed a gradual diminution in the size of his stream of urine, which now rapidly increased. His union failing to be productive, he called in his family physician, who treated him for stricture; but failing to relieve him, he advised a

trip to a Northern city to be operated upon. Shrinking from so heavy an expense, he applied to me.

With great care and patience, I succeeded in introducing a No. 2 gum bougie, which caused considerable irritation. I ordered from Messrs. Tiemann & Co., of New York, some sea-tangle bougies about 14 inches long, and on the 6th of June, 1875, I introduced a No. 2 sea-tangle bougie beyond the stricture, previously moistening the bougie in warm water. I allowed it to remain *in situ* 8 hours, and upon removing it, which was easily and almost painlessly done, I found it expanded to about four times its original size. The expansion was not symmetrical, and although larger beyond the seat of stricture than at the latter point, there was no difficulty in removing it, owing to its being covered with a mucilaginous substance. But little irritation followed, and my patient was not detained from his duties a single day during the entire treatment.

Again, on the 10th of June, I inserted a No. 4 sea-tangle bougie, allowing it to remain 8 hours, which was withdrawn very much expanded. On the 15th of June, I placed in a No. 6 sea-tangle bougie, which was allowed to remain only 6 hours, thoroughly dilating the urethra. Afterwards, for several weeks, I introduced twice a week first a No. 10, then a No. 11 silver catheter, to guard against a reduction in the size of the urethra, and further hasten the absorption of the remains of the hard, callous stricture. My patient was also suffering from chronic prostatitis, with the customary urethral discharge, but after dilatation, it yielded to appropriate treatment. My patient is now well and robust, having gained several pounds of flesh, and is highly pleased with the result of the operation.

I report this case, not that I claim originality in using dilators other than metallic, but simply to call the attention of the profession to this particular bougie, that they may give it a thorough trial. The simplicity and success of the treatment, wanting in that pain and nervous derangement incident to dilatations with metallic bougies, are claims which demand further trial of this useful laminaria digitata.

The subject of the retiring President's address was "The Use of Hot Water in Uterine Diseases" (see page 309 of this issue).

A resolution was offered by Dr. Frank Duffy to appoint a committee to petition the Legislature to legalize the dissection of the bodies of criminals, and the unclaimed bodies of paupers dying in public charge. After some discussion, the resolution was adopted, and Drs. Frank Duffy, Wood, Ennett, Lucas and Faison were appointed said committee.

On motion of Dr. Satchwell, a committee was appointed to

memorialize the next General Assembly in favor of a State Board of Health. Drs. Satchwell, Bellamy and DeRossett were appointed as the Committee.

On motion of Dr. Satchwell, a committee was appointed to report at next meeting on the subject of "Heredity." Drs. J. F. Long, S. S. Satchwell and T. F. Wood were designated as the committee.

Drs. Hyatt, De Rossett and Faison were appointed a committee to take into consideration the establishment of a medical journal.

Drs. Long, Hyatt and Wood were appointed the Executive Committee.

Drs. Attmore, C. Duffy, Jr., and Seawell were appointed the Committee on Publication.

Drs. Hyatt and Frank Duffy were appointed to take the Constitution and By-Laws of the Association to the next meeting of the State Society.

All members who may be present at the meeting of the State Society were requested to act as delegates.

It was decided to hold the next meeting of the Association in Tarboro, on the first Tuesday in December, 1876.

Drs. Stith, Rountree and Cobb were appointed the Committee of Arrangements.

The following officers were elected for the ensuing year: Dr. H. W. Faison, President; Dr. P. W. Wooley, 1st Vice President; Dr. S. B. Flowers, 2d Vice President; Dr. W. H. H. Cobb, 3d Vice President; Dr. M. E. Robinson, 4th Vice President; Dr. Charles Duffy, Jr., Treasurer; Dr. Frank Duffy, Secretary; Dr. W. T. Ennett, Orator.

Analyses, Selections, &c.

Stone in the Bladder.—J. W. S. Gouley, M. D., Professor of Diseases of the Genito-Urinary System in the Medical Department of the University of the City of New York, Surgeon to Bellevue Hospital, etc., has kindly furnished us an abstract of his paper read before the recent session of the New York State Medical Society on *Stone in the Bladder; Its Spontaneous Expulsion, and its Removal by Lithotrity, with an Analysis of Thirty-five Cases*. The paper will appear in full in the Transactions of the Society for 1876, while this abstract has been furnished the *Medical Record* and the *Virginia Medical Monthly*; we also find it as we go to press in the July No. of the *Nashville Journal of Medicine and Surgery*:

It contains a brief account of the genesis of vesical stones, of the treatment of nephritic colic, of the use of alkalies and other remedies in expediting the spontaneous expulsion of small calculi from the ureters and from the bladder, of the early detection of stone, and of the instruments best adapted to the purpose.

The writer considers that the time has arrived for lithotripsy to be adopted as the general operation in adult males whose urethræ are normal, or can be rendered so practically; for lithotomy to be resorted to only in cases accompanied by narrow and undilatable urethral strictures, or by cystitis with uncontrollable vesical irritability, and in young children; and for perineal-lithotripsy and its modifications to be reserved for cases of large stones. A succinct account of these various modes of treatment of stone in the bladder is followed by a report of 35 cases, an analysis of which is here given.

The 35 patients ranged from 2 to 74 years of age.

In 7 cases the stones were expelled spontaneously from the bladder; 13 cases were subjected to lithotripsy; 10 cases underwent lithotomy, and in 5 cases perineal lithotripsy was done. Thirty-three recovered and two died.

The 7 patients whose calculi were expelled from the bladder were from 25 to 62 years of age. They had all had from one to four attacks of nephritic colic, and five had already expelled calculi per urethram.

Two had urethral strictures; in one of these, two calculi were impacted behind a stricture which had to be dilated before they could be extracted. Two had prostatic hypertrophy, but the stones were finally expelled.

In one case the calculi were very small, but numerous; in one there were ten calculi, the size of buckshot; in one case there were four, one of which was equal in diameter to No. 15 sound, and weighed ten grains; in one case there were two, both of which became impacted behind a urethral stricture, and were extracted with dressing forceps. There was one in each of the three remaining cases, and in one of these cases the stone weighed ten grains.

The calculi were all of uric acid, and were expelled from the bladder in from 1 to 30 days or more after the nephritic colic.

The treatment consisted in the use of diluents and alkalies, cathartics, dilatation of the urethra, etc. All the patients made good recoveries.

The 13 patients subjected to lithotripsy were between the ages of 24 and 66; three were under 30; three from 34 to 37; three from 48 to 60, and four from 62 to 66.

Eight of the 13 had troublesome cystitis, with much vesical

and urethral sensitiveness, which required prolonged treatment before the operation could be done. Three had urethral strictures, which, however, yielded to gradual dilatation before the operation. In five cases it was necessary to enlarge the meatus urinarius by incision. Four cases were complicated with prostatic enlargement.

Two cases had before undergone lithotomy. Two cases had already been lithotriptized.

The stone was small in two cases; of medium size in five, and exceeded one inch in diameter in four cases.

There were several stones in one case; 4 in one case; 2 exceeding 1 inch in diameter in one case, and 1 stone in each of the 10 remaining cases.

Every case underwent the most careful preparatory treatment.

Four cases were cured in one sitting; one in three sittings; one in four sittings; four in five sittings each; one in seven sittings, and one in twenty-four sittings. One case was followed by a rigor after the first sitting; one case after each of the four sittings; while the remainder had no rigors at all. In one single case did any of the sittings exceed five minutes, and that by one minute only. In most of the cases the sittings were of from $1\frac{1}{2}$ to 3 minutes' duration.

The lithotrite was introduced twice in one sitting in 3 cases. In all the others, the instrument remained in the bladder until from 3 to 15 crushings had been made, when it was withdrawn not to be again used until the next sitting.

The intervals of time between the sittings varied from two to eight days, except in two cases, where they were extended to several months at the request of patients.

In no case did orchitis supervene. No sitting has been followed by severe hæmorrhage, and only in some of the patients of 60 and upwards has the urine been tinged with blood. Even in these cases, the urine became clear within 24 hours.

No sitting has been followed by severe cystitis; on the contrary, after the second sitting the vesical irritability has usually so diminished as to render the subsequent sittings easy for the patient and for the operator.

Expulsion of detritus from the beak of the lithotrite was always effected to a sufficient extent to permit closure of the jaws, so that the urethra sustained no injury in any case during the withdrawal of the instrument. The detritus was spontaneously expelled with the urine in ten cases. Aspiration of the fragments was made in one case. In one case aspiration was used only during one sitting—the detritus having been expelled spontaneously afterwards. In one case all the detritus was removed by the lithotrite and by an evacuating catheter, as none could

be expelled on account of vesical atony. Impaction of fragments in the urethra occurred in five cases, but caused little inconvenience in any case, as they were either very soon expelled or forthwith extracted. The amount of detritus gathered varied from a few grains to an ounce and a quarter. The most rigid after-treatment was enjoined in each case.

There has been no recurrence of the trouble in any case except one, in which calculi were periodically escaping from the ureters. This was the fatal case; the cause of death was pyelonephritis—both kidneys and ureters being filled with small calculi. The operation had to be discontinued twice on account of the renal trouble, and death occurred about eight weeks after suspension of the treatment.

Of the ten patients upon whom lithotomy was performed, one was 24 years old, and the others were all under 10 years of age. The eldest of these was 8 years; the youngest 2 years of age.

Three patients had troublesome cystitis. One had urethral stricture.

The stone was large in one case; in the others it was of medium size and small.

There were three stones in one case, two in another, and one in each of the remaining eight cases.

Lateral perineal cystotomy was done in five cases; lateral section of the anterior half of the prostate, with cystectomy, in three cases; and the median operation in two cases. Fragmentation of the stone was necessary, before extraction could be accomplished, in one case, and in this lateral perineal cystotomy was done. Extraction was not attended with difficulty in any of the other cases. There was no serious hæmorrhage in any case.

The urine was passed at will from the day of the operation in four cases. The urine flowed entirely through the urethra from the eleventh day after operation in one case; from the eighth day in one; from the fourth day in one; time not stated in five. In two cases all the urine, from the time of the operation, was passed at will through the urethra, not a drop escaping by the wound. The wound was healed in 28 days in one case; in 20 days in two cases; in 14 days in three; in 10 days in two; in 7 days in one; and the date of union of the wound was not stated in one. In one case a fistula still exists, through which a few drops of urine escape. All the patients recovered.

Of the five patients subjected to perineal lithotomy, one was 17, one 35, one 60, one 74 and one 52 years of age. One had been lithotomized seven years before. They had all long been distressed with cystitis. In one case there were two stones; the four others had only one calculus each. In one case the nucleus of the stone was a piece of glass. In all the cases the stones

were large—the detritus weighing in Case I, 1200 grains; in Case II, 480 grains; in Case III, 270 grains; in Case IV, 960 grains; in Case V, 409 grains. They consisted all mainly of phosphates.

The perineal incision was made freer than usual, and the bulb of the urethra had to be divided for nearly its whole length in Case I. In two cases the incision was made in accordance with Dolbeau's directions, and the membranous portion of the urethra only was divided. In two cases the bistoury was plunged, cutting edge upward, into the median line of the perineum, close to the anal margin, until its point entered the groove of the staff, and nearly the whole membranous portion of the urethra cut longitudinally from behind forwards, and the cutaneous incision was completed at one sweep in withdrawing the knife.

In one case dilatation of the prostatic urethra and neck of the bladder was made partly with a two-bladed dilator, partly with the finger. Dolbeau's six-branch dilator was used in three cases, and the hydraulic dilator in one case.

Fragmentation was made partly with a fenestrated lithotrite, introduced through the normal route; partly with strong forceps passed through the artificial opening, in two cases. Dolbeau's and my own lithoclasts were used in the others. The stone was hard in one case, and soft in four cases.

Exploration as recommended by Dolbeau, with small lithotomy forceps, was made in all the cases; in three instances, the stone, being once seized, could not without difficulty, and twice not without considerable delay, be disengaged from the forceps. Extraction of the detritus was, in all the cases, effected with the lithoclasts, with lithotomy forceps, and with the scoop.

In all the cases, frequent vesical injections of cold water had the happy effect of bringing within reach large and small fragments, after the bladder had seemed free from calculous matter. Contrary to Dolbeau's directions, the finger was a number of times introduced into the bladder, in every case without giving rise to the least untoward symptom. The loss of blood did not exceed four ounces in any case.

In one case the urine was passed at will from the day of the operation; in one case within 24 hours thereafter; and in one case in 48 hours. In one case the urine dribbled from the wound for two weeks. In the fatal case the urine also dribbled from the wound—very little occasionally passing through the normal route.

The wound healed in two weeks in two cases. A perineal fistula was established as a precautionary measure against cystitis in one case.

Four patients recovered, and one died in a week of pyæmia.

Book Notices, &c.

Grundriss der Geschichte der Medicin und des Heilenden Standes. Von Dr. J. H. BAAS. (*A Criticism of a New History of Medicine.* By GEORGE REULING, M. D., Surgeon in charge of the Maryland Eye and Ear Institute, Baltimore.)

After the death of Mézeray, the great French historian, a gold dollar was found among his effects. It was carefully folded in a piece of paper on which the following words were written: "I have preserved this gold dollar for the space of twenty years, in order to rent a window on the Place la Grève, when good luck would have the executioner hang up a critie."

Though bearing the above cynical bequest well in mind, I nevertheless undertake a short critical survey of a very remarkable work, which is not yet known to the English readers. I refer to the excellent "History of Medicine and Medical Men," written by Dr. Baas, Professor in the University of Goettingen, and published by Encke, of Stuttgart, in the present year. The old Latin saying, *habent sua fata libelli* is true enough; and I am positively certain that the destiny of *this* book will be one of unlimited success; for it is filled with the most desirable requisites, being learned, yet entertaining; philosophic, yet not abstruse; complete in every detail, yet no mere digest of dry historical matter. To all the so-called medical histories heretofore published, not even excepting Dunglison's, the proverb: *De omnibus aliquid, in toto nihil*, can be well applied; for not only were we forced to receive a great many assertions contained in these histories *cum grano salis*, but they presented so few really interesting and instructive facts, that we were obliged to accept them as transient lodgers in medical literature, with a compassionate shrug, *en attendant mieux*.

The work of Baas, however, meets all requirements the most exacting criticism can make; and I would not only recommend it to physicians and teachers of medicine, but to the laity as well, not on account of its intelligible form alone, but also because of the happy manner with which the abundance of matter is handled. The book, in fact, in contra distinction to those of a similar nature, previously published, will be found to be entertaining and highly instructive by all who in any way stand in connection with medicine, *i. e.*, physicians, medical jurists, druggists and veterinarians, as well as by every scientifically educated person. It is worthy of remark, by the way, how people now-a-days desire historical matter, provided it be treated in an intelligible and

agreeable way; the rapid sale of the many editions of Buckle's History of Civilization goes to prove this.

But to return. That every branch of medicine is taught and learnt superficially in our American universities, is a fact as sad as it is universally known; the entire course of study is often confined to the short period of eighteen months and, after graduation, the little theory that has been acquired, is speedily forgotten in the routine of every-day practice. This increasing evil might be effectually done away with if the student would pay more attention to the great results his science has achieved in the past, and if he would carefully peruse the lives of those great explorers in the field of medicine who battled against ignorance and successfully overcame intolerance and persecution. Such study would serve to incite emulation; it would goad one on to closer and more serious application, making medicine become less of a *business* in America, and more of a science.

The title of Professor Baas's work, would lead one to suppose that it offers to the reader nothing but what Macauley calls the "protean forms of uninspired compilation;" on the contrary, however, it abounds in original ideas and excellent suggestions; in fact, the author is a writer of high asthetical speculation, and his style is nearly always eloquent and never vapid. The perusal of such a book is doubly refreshing after reading the many attempts made by the golden-laced Dulcamaras of our time. Professor Baas always flashes the most interesting conviction upon his readers, and occasionally becomes so very entertaining, that one might fancy—and without flattery be it said—*albano musas de monte locutas*.

What adds to the importance of the book is that the author is an authority of the highest standing in the scientific world, being one of the ablest and most prominent diagnosticians in Europe. It was he who first demonstrated the kindred nature of the vesicular and the laryngeal murmur. He was also the first who employed the tuning-fork as a means of diagnosis in pectoral troubles. Professor Baas has built his reputation upon a stable basis, and when the ephemeral productions which are foisted yearly upon the medical world, have long passed into oblivion, his *Grundriss der Medicin* will still be read with pleasure and studied with profit.

It may be remarked *en passant*, that the author styles his book a "*Grundriss*," that is a "ground-plan," or sketch. The title is the only fault an intelligent critic can find with the work; modesty, however, has always been an attribute of true learning and is so in this case. In contra-distinction to being a sketch, indeed, it is the most complete history of medicine which has yet

been written. The attention of American publishers should be directed to it, in order that so excellent a production may be rendered available to the many intelligent readers in this country by being speedily translated into English. I venture to prophesy that in case the translation is well done, the volume will soon become a most valuable text-book in our colleges and universities.

[In this work, Professor Baas has the following paragraph: "Dr. Liebreich, of London, Dr. Knapp, of New York, and Dr. George Reuling, of Baltimore, are the three most prominent representatives of the German school of ophthalmology abroad." This is a compliment of which each of the gentlemen named may well feel proud, coming as it does from so competent an author. We would be glad if some American publisher would act on the hint given by Dr. Reuling in the last paragraph of the above notice.—EDITOR.]

Editorial.

CODE OF ETHICS—MEDICAL ORGANIZATIONS AS TRADES-UNIONS.

In our last issue, we pointed out some of the prevailing misconceptions as to the chief object of the American Medical Association, stated in its "Plan of Organization." We showed that the so-called "Code of Ethics" is, practically, of more importance, in professional estimation, than are scientific attainments or gentlemanly deportment in society; and we charged against the "Code" that it is responsible for this false education. We alluded to several provisions of the "Code" which are opposed to a common sense view of the subjects discussed. Finally, we stated in general terms some of the unequal and unfair workings of the "Code" as applied by societies to offending members.

As was to be anticipated, the expression of such views has elicited some adverse criticism, and perhaps some ill-natured personal remarks. But we are glad to know, from letters which we have received, that our remarks have met the approval of many of that class of physicians for whose opinions we have the highest regard. For mere carping, fault-finding and censoriousness, we have but little respect. We must have a satisfactory reason for a change in the views we have already expressed. An appeal to mere personal considerations has no effect upon us.

We are honest and deliberate in our convictions that the present "Code of Ethics" is open to grave objections, is injurious to the welfare of the profession, is the cause at times of bitter strife, hampers scientific medical progress, and should at least be modified in some fundamental particulars in accordance with the more advanced and the more liberal views prevailing among educated men of our day. It is far from us to encourage a *reckless* violation of the "Code," while it is accepted by the profession; but our object is to invite a calm, unprejudiced, unselfish consideration of some of its features which strike us as unreasonable and over-exacting, with a view to their nullification or modification. In our personal character, we claim to have kept all the regulations of the "Code"—certainly we have no hesitation in comparing our record with that of any person in the profession, though we have had inducements, as have others, to violate some of the injunctions.

Turning aside from this personal explanation as to our position, which we trust is sufficiently full and explicit, we wish now to call attention to *Medical Organizations as Trades-Unions*. The ground occupied by the American Medical Association on this subject, is very peculiar. It is totally unsuited to practical purposes. Let us examine it a little in detail.

The "Code" now in force, as explained by the Judicial Council in 1874, enjoins* that we should "avoid creating the impression on the public mind that the profession and its social organizations are little better than mere trades-unions, having for their chief object mutual pecuniary protection." The principle here set forth is plain and right enough, and we suppose that no physician of generous impulses objects to it. But what is the practical working of the profession—what, indeed, does the "Code" itself require?

Almost the first thing that a medical "social organization" does on organizing, is to fix a tariff of charges; or else the "regular" physicians of the town or county are called together in convention to adopt some specific regulations "relative to *pecuniary acknowledgements* from their patients;" and the "Code" (Article VII, in chapter *Duties of Physicians to each other, etc.*), directs that "it should be deemed a point of honor to adhere to

**Trans. Amer. Med. Assn.*, 1874, pg. 33.

these rules." If it be remembered, as pointed out in our last month's editorial, that intentional violation or disregard of "any article or clause" of the "Code" (Article IX, *By-Laws*, in Plan of Organization, etc.), involves as a legitimate necessity the exclusion of the offender from professional association and respect, then we may see at once the effect of the "Code" on the subject of medical organizations as trades-unions.

From what has been said, it is plain that the "Code" does not allow a physician to put his own charge on the professional services that he himself may render; but *compels* him, under penalty of expulsion from professional circles and professional recognition, to adopt the charges of others—many of which charges, he may conscientiously believe are improper. Is such an arbitrary provision, conflicting as it may and does with the honest convictions of some highly moral men, whose knowledge of medicine may even be sought with profit by some of the "regulars"—is such a provision becoming the dignity of a learned profession, one of whose chief boasts is liberality in opinion and practice? We do not propose to discuss the question of tariffs; that subject may demand our attention hereafter. We desire simply to refer to it as bearing upon the subject of medical trades-unions.

Another effect of the "Code" is to compel the young graduate in medicine, without practical experience, who comes, too, perhaps as a stranger into a community, to adopt the same tariff of charges as that used by the long known and well-established practitioners, although every one has common sense enough to know that the services of the former have not the same marketable value, in popular estimation, as those of the latter class of physicians. Nor, to overcome this disadvantage, is *any* advantage allowed the young physician by his elder "brethren." Like some other so-called mutual corporations, the benefits all follow one channel. Even should the young practitioner, without underbidding, or without violating one principle of honor, or custom among gentlemen in other walks of life, have a medical contract offered him—the acceptance of which contract would afford ample opportunities for enlarging his medical experience and observation, while at the same time the position might prove in some measure remunerative—yet this young physician is prohi-

bited by an ordinance (*Trans. Amer. Med. Assn.*, 1869, pg. 41), from accepting it for any stipulated sum per annum or by the month, *unless* the contract be offered by the National, State, municipal or county authorities.

More than this, the "Code" goes so far as to prohibit even the *giving* of "advice *gratis* to the affluent" (*Art. V, § 9, Code, Chapter on Duties of Physicians to each other, etc.*), because "it is defrauding in some degree the common funds * * * which might justly be claimed" by the profession. On the other hand, it prohibits "publicly offering advice and medicine to the poor *gratis*." (*Art. II, § 3, Chapter loc. cit.*) What other than the "regular" medical profession would tolerate such an interference with the personal rights and privileges of its members in the matter of gifts?

Did our space permit, we might mention other particulars, bearing on this subject. But we must satisfy ourselves with the remark that if the injunctions of the "Code" to which we have herein called attention, and the like, are not the usual provisions of trades-unions, then we have been totally misinformed as to the nature of their regulations.

In view of these things, are we still called upon to affirm that white is black? As sensible men, searching after the truth in all things that we undertake to examine, are we to stultify ourselves as to the meaning of facts which can be plainly interpreted by even a school-boy? Let us rather acknowledge as scientific men, as we are sometimes compelled to do in scientific matters, that our past conduct has been governed by preconceived opinions. We are satisfied that an intelligent examination of our position, and of the evidence adduced in its support, will compel the conviction that too frequently our "so-called" *social organizations* are in reality nothing more than trades-unions; and that their observance of the "Code" itself, *instead of removing*, must confirm "the impression on the public mind that the profession, and its social organizations are little better than trades-unions, *having for their CHIEF object mutual pecuniary protection.*" How else can we expect to be viewed under existing rules? What organization of intelligent men is more stringent in regard to the business matters of the individual members? Expulsion from professional recognition is the necessary consequence of violation

of any of the injunctions to which we have called attention—it is the most severe punishment that the profession can impose upon any one in or out of its ranks. What more severe punishment can a trades-union inflict upon one of its members for violation of its tariff regulations?

Treatment of Whooping Cough.—At the late session of the American Medical Association, in the Section on Practice of Medicine, etc., during the interesting discussion on whooping cough as a neurosis, Dr. John J. Caldwell, of Baltimore, who was the leader in the discussion, remarked that he had been enabled to cut short the disease in a few days, by using the following in the form of spray :

R. Fluid extract belladonna.....gtt. viij-xvj.
 Bromide ammonium ℥j.
 Bromide potassium.....℥ij.
 Distilled water.....℥j.

M. Use as a spray three or four times a day.

The Doctor uses Codman & Shurtleff's spray atomizer, which is regarded as the best of all instruments yet introduced for the purpose of atomization. The instrument is charged, placed on a table, and set into full operation. Then the little patient is placed before it; he cries, and by the deep inspirations, the mediated spray is carried into the bronchial tubes and air cells of the lungs. Two or three days of this treatment breaks the spasm and relieves the whoop effectually and permanently. This treatment, Dr. Caldwell says, was suggested by Niemeyer's view, that the pathology of the disease consisted in extreme hyperæsthesia and catarrh of the mucous membrane of the air passages.

International Medical Congress.—At the request of the Committee of Arrangements, we take pleasure in restating that the International Medical Congress will be formally opened in the University of Pennsylvania, Locust and 34th streets, Philadelphia, at noon on Monday, September 4th, 1876.

The General Meetings will be held daily for five consecutive days from 10 to 1 o'clock. The Sections will meet at 2 o'clock. Luncheon for members of the Congress will be served daily in the University building from 1 to 2 o'clock.

On Wednesday evening, September 6, Dr. J. J. Woodward, U. S. A., will address the Congress on the Scientific Work of the Surgeon-General's Bureau.

The public dinner of the Congress will be given on Thursday evening, September 7, at 7 o'clock.

The registration book will be open daily from Thursday, August 31st, to Saturday, September 2d, inclusive, from 12 to 3 P. M., in the hall of the College of Physicians, N. E. corner of 13th and Locust streets, and at the University of Pennsylvania on Monday, September 4th, from 9 to 12 M., and daily thereafter from 9 to 10 A. M. Credentials must in every case be presented.

Letters addressed to the members of the Congress, to the care of the College of Physicians, N. E. corner of Locust and 13th streets, Philadelphia, during the week of meeting, will be delivered at the University of Pennsylvania.

The Secretaries of State and Territorial Medical Societies are requested to forward without delay to the Chairman of the Committee on Credentials, I. Minis Hays, M. D., 1607 Locust st., Philadelphia, lists of their duly accredited delegates.

Delegates and visitors intending to attend the Congress are earnestly requested individually to notify immediately the same Committee. The information is desired to facilitate registration, and to ensure proper accommodation for the Congress.

Members intending to participate in the Public (subscription) Dinner of the Congress will please notify the Secretary of the Committee on Entertainment, J. Ewing Mears, M. D., 1429 Walnut street, Philadelphia.

Gentlemen intending to make communications upon scientific subjects, or to participate in any of the debates, will please notify the Commission before the 15th of August.

The Proceedings of the Eastern [North Carolina] Medical Association, at its session in December, 1875, appear in this issue of the *Monthly* by request of the Publishing Committee. Having yielded the space for these publications, it is not for us to criticize them. Some of them are, in our opinion, excellent papers, and contain good, practical suggestions. There are others, however, that bear the marks of evident haste in their preparation, while the views expressed by one or two of the writers are opposed to all past teachings in the profession, and are not well supported by argument.

We are sorry that the irregular receipt of the manuscripts has compelled so many to appear under the head of *Proceedings of Societies* instead of as independent papers in the first portion of the journal. These Proceedings will, however, be found of interest to many of our readers.

American Dermatological Society.—At an informal meeting of several dermatologists in Philadelphia, June 7th, 1876, after

the election of Dr. Edward Wigglesworth, of Boston, Chairman, and L. D. Bulkley, New York, Secretary pro tem, it was resolved to call upon such American physicians as had evinced a special interest in dermatology, to unite in forming an American Dermatological Association.

Resolved, That the meeting for organization be held in the University of Pennsylvania, Philadelphia, on Wednesday, September 6, 1876, at 6 P. M., or immediately after the close of the Section of Dermatology and Syphilology of the International Medical Congress, on that day.

It is sincerely desired that all who are interested will signify their pleasure to the Secretary at the earliest opportunity.

The names of Drs. Louis A. Duhring, Philadelphia; Lunsford P. Yandell, Jr., Louisville; George Henry Fox, New York, and J. E. Atkinson, Baltimore, are also appended to the circular calling for the Convention.

Buffalo Lithia Springs.—There is abundant testimony to prove remarkable medicinal virtues in the waters of these Springs. Prof. W. T. Howard, of Baltimore, for instance, remarks upon their great value in "*all the affections peculiar to women that are remedial at all by mineral waters.*" Prof. Hunter McGuire, of Richmond, testifies as to their value in "cases of disease of the urinary organs." The late Dr. W. H. McKee, of Raleigh, N. C., knew of no remedy equal to the water "as a tonic, alterative, diuretic and diaphoretic." All of these authors remark upon its virtue in chronic malarial troubles. In this particular, Prof. Otis F. Manson, of Richmond, speaks of it as "*especially curative.*" Testimonials are also abundant as to the value of Spring No. 2 in rheumatism and gout. A more intelligent opinion, however, as to the uses of the water may be obtained from a knowledge of the solids they contain. Spring No. 1 contains 73.6 grains per gallon of water; No. 2 contains 98.3 grains per gallon. Both of these Springs contain sulphates of magnesia, alumina, potash and lime; carbonate of potash, bicarbonates of lime, lithia, baryta and iron; chlorides of sodium and silica; traces of phosphoric acid, iodine, &c. It is also a delightful and popular summer resort.

The Hygeia Hotel, at Old Point Comfort, Va., is a peculiarly delightful resort during the summer and early autumn months. In addition to other objects of interest in the neighborhood, a visit to the renowned Fortress Monroe would be enjoyable. The location itself affords a water view that is scarcely equalled on the Atlantic Coast, while the riding, boating and fishing advantages are excellent. As to the arrangements of the Hotel, under

the present proprietorship, for the comfort or pleasure of guests, they are nowhere excelled. Health seekers will enjoy the refreshing sea breezes, which must also prove beneficial to them. We are glad, too, to learn that those in need of medical services can have the faithful and efficient attention of Dr. G. Wm. Semple, of Hampton, Va. Regular line steamers from Baltimore, Richmond and other points have daily landings at the wharf, only a few yards distant; and there is almost hourly communication with Norfolk city.

The Ohio Medical Recorder is the title of a new medical \$2 monthly journal of 48 pages commenced in Columbus—Drs. J. W. Hamilton and J. F. Baldwin, editors. We have to congratulate the editors upon the first two Nos. which we have received. This is not to be confounded with Prof. Pooley's *Ohio Medical & Surgical Journal*—a bi-monthly of 96 pages—\$2 *per annum*, which journal also merits success.

The Office of Health Officer of Petersburg, Va., has been abolished—another instance of culpable ignorance or miserable policy on the part of the city authorities. The plague of one or two preventable epidemics may impart wisdom enough to protect the next generation.

Much Matter is crowded out, notwithstanding this issue, as the July No., contains 80 instead of 76 pages.

Obituary Record.

Dr. F. K. Bailey, Knoxville, Tenn., died at his home June 17th, 1876, aged 60 years. He was "enthusiastically in the harness of medical study up to his last days." He was a frequent and welcome contributor to the pages of many medical journals in this country. Readers of the *Monthly* will recall some of his articles. His historical narration of the cholera in and around Knoxville in 1873, published in the United States "Epidemic Cholera" reports for that year, was one of his most important publications. He was a good man, a well informed practitioner, and worthy of the profession he espoused.

We regret not having the space in which to publish the full and well-written memoir prepared by Dr. A. B. Tadlock.

Dr. James Jones, Jr., Professor of Diseases of Women and Children in Charity Hospital Medical College, New Orleans, died recently at Biloxi, Miss.—*N. O. Med. & Surg. Journal*, July, 1876.

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Original Communications.

ART. I.—*Clinical Study of Diphtheria in 1875—Apparent Warrant for New Views, and an Abortive Form of Treatment.** By GEORGE BAYLES, M. D., New York City, Member of N. Y. Public Health Assn.; Physician to N. Y. Lying-in Asylum; Physician to Northwestern Dispensary, formerly of *Class of Diseases of Children*; Delegate (for four years from 1875) to N. Y. State Medical Society from New York County Medical Society, etc., etc.

By the happy issue of very positive treatment in a score of the most unmistakable cases of diphtheria in 1875, I have been led to entertain great confidence in a certain hypothesis upon which my method of treatment was founded. Clinical accidents and ventures, forming an interesting story in themselves, led to what is herein presented.

Every one can contribute something to the sum of human knowledge, if so minded. It is a duty weighing like a burden of responsibility upon every practising physician to utilize and memorialize his facts as fast as they accumulate in measure sufficient to be reliable indices of the worth of his observations and treatment; or, in other words, as fast as they become prac-

*We invite attention to the explanatory letter of Dr. Bayles (appended to this article) in regard to this paper, which was read before the late session of the Medical Society of the State of New York. In view of the facts stated in the letter of Dr. Bayles, his grounds for complaint against the action of his State Society are well taken. Although we have the highest regard for Dr. Squibb, and his scientific attainments, we cannot approve of the prominent part he has taken in the matter, and which, as the records now remain, will reflect upon the high professional standing of no less a gentleman and a scholar. It is but just to all parties concerned, that the action of the Society, which even refused the reference of the paper to the Publishing Committee, should be rescinded at the earliest possible opportunity.—EDITOR.

tically suggestive. The force of this sentiment was very clear to me when I examined the 23d Annual Report of the Northwestern Dispensary of the City of New York, issued in February, 1876, relative to the work of that institution for the year 1875. I have been a member of the medical staff of this Dispensary since 1871—first for three years as physician to the class of diseases of children, and later, as physician of the second visiting district. The report mentioned embraces the sub-reports of the four visiting districts.

The cases, of all kinds, treated in the several districts during 1875, are in number as follows :

1st district,	724—including	4 of diphtheria.
2d “	757—	“ 21 “
3d “	1262—	“ 23 “
4th “	1006—	“ 20 “

There were, therefore, 68 cases of diphtheria out of a total of 3749 miscellaneous cases of sickness treated by the visiting physicians of the Dispensary during 1875, or rather less than two cases in a hundred.

In the first district, two of the four diphtheria cases died. In the second district, there were twenty-one cases of diphtheria, and no deaths. In the third district, there were six deaths out of twenty-three cases of diphtheria. In the fourth district, four deaths out of the twenty cases reported. Forty-seven cases of diphtheria in the first, third and fourth districts yielded fourteen deaths. Twenty-one cases in the second district ended, in each instance, in perfect recovery. The comparison must be exceedingly favorable to the side having no deaths to record.

There were other cases of diphtheria, and some deaths from this disease, within the boundaries of my district in 1875 ; but the benefit of the Dispensary service was claimed by the twenty-one only, whose cases are reported, and who, in every instance, recovered. I have naturally sought to review all the facts concerning these cases, even to a point that may be regarded as super-circumstantial, in order to derive the means of inspiring in others the same confidence in the soundness of an hypothesis that my own experience and observation enabled me to enjoy.

The second Dispensary district lies between Twenty-eighth street on the South, Thirty-fourth street on the North, Fifth Avenue on the East, and the North River on the West. One

or more of my cases occurred in every street of this district excepting Thirty-fourth street, and between each of the avenues, save the Fifth and Sixth and the Eleventh and Twelfth, or the water's edge.

The disease attacked no one with whom I had professional relations in the district in the months of January, May, July, October and December. It attacked two in February, two in March, three in April, three in June, two in August, eight in September, and one in November. Whatever cases of true croup and other laryngeal, pharyngeal or tonsillar affections may have occurred during these several months, are, of course, carefully excluded from this review.

All the cases were of children, excepting one, viz.: that of Jeremiah Cassidy, whose three children were sick, all at the same time in April; and as he was very attentive in the sick room, was himself taken ill. I shall not find it necessary to say much, if anything, about Mr. Cassidy's case, as it will not serve any better to illustrate my subject than the remaining twenty cases, whose ages varied from five months to 14 years, and which, of themselves, make a convenient series in round numbers, and are confined to the periods of infancy and early youth. These twenty cases cost me as much labor, solicitude and sympathizing care as all the seven hundred and odd Dispensary cases that I had to treat during the year.

Now, at the outset, was I clear and correct in my diagnoses? Did I not have among my twenty cases of supposed diphtheria some cases that lacked the true, specific diphtheritic character, and which may have been cases of croupous or membranous laryngitis? I had several cases of this nature during the year, but never confounded them with diphtheria. My twenty cases of diphtheria were far too clinically definite to be mistaken for anything, however nearly allied by nature or symptoms it might be to diphtheria. Over and above all that led me to regard my cases as probable diphtheria, was that I had, by a train of accidental circumstances, become possessed not only of evidences of an important pathological fact, but also of a test, by means of which such fact might be verified. In other words, I not only discovered that diphtheria was primarily constitutional, but that I had it in my power to prove that to be true.

When, in each case, I could make a slight abrasion or scarification of the cutaneous surface on some part of the person quite remote from the usual seat of visible local lesion, and soon observe the formation of a characteristic membranous or tissual patch, a fibro-plastic slough, covering the surface of the wound (such as never by any accident follows a knife-wound upon the surface of the body when free from the constitutional infection of diphtheria), I had something very positive to aid in my diagnosis. Often (indeed in every instance but one), by this means, I had elicited a definite response to my inquiry before any of the pseudo-membranous patches, due in the faucial region, had made their appearance. Occasionally, these test-abrasions had sufficiently proved the presence of true diphtheria when not a sign of the common characteristic throat lesion made its appearance during the entire term of the diphtheritic invasion. This happened in two of my cases.

Sometimes these induced, or traumatic exudative patches would appear simultaneously with those of the tonsillar or faucial patches, or synchronously with the catarrhal flux peculiar to the nasal seat of local lesion. Sometimes they would follow, as would be the case in all instances where the test-abrading was done after throat lesions were established—one case of this kind having been mentioned.

As a matter of course, the office of these test-abrasions was to precede the common local lesion, and announce their probable appearance and nature; and whenever the test was made after the advent of throat lesions, it was to identify them with diphtheria, or else to prove them to be merely croupous. In the instances (of which there were two) wherein no local lesion appeared at all, I have been inclined to suppose the test-abrasions served as local derivatives, metastasizing the usual pathic action of the mucous surfaces by its transfer to the cutaneous.

Now, what constituted my grounds for suspicion of diphtheria at a time when none of the characteristic throat symptoms were present? This is less easily answered than asked, perhaps, and exhibits a capital field for intuitive perception. But, in point of fact, there is a combination of little symptoms, more or less distinctly present, that to the Dispensary trained eye will not only suggest the advent of diphtheria, but make any reasonable

test justifiable if there is one at command. Parents in the habit of seeking medical aid at the Dispensaries avail themselves liberally of their privilege, and it is quite certain that a case of malaise, however slight or recent, will be brought to the doctor's attention. In such cases, when I have found a patient with a quick, irritable pulse, say anywhere from 100 to 140 beats in a minute, with an internal temperature, as registered by the clinical thermometer, that clearly indicates fever; while at the same time the extremities and surface, perhaps excepting the head, are as cool as in perfect health, or even a shade cooler than the normal surface temperature, but without perceptible moisture, the respiration not in consonance with the evidence of internal febrile action, but tending to be slower than normal, I have three points sufficiently phenomenal to excite attention. When I observe a marked etiolation of complexion, with a slight watery transparency of the skin, or, perhaps, a shade of lividness many degrees removed from, but in the direct line of, discoloration of the cyanotic state, with, perhaps, a pale or "washed out" appearance of the iris, and a more or less pronounced expression of seriousness, not usual to the face, I have two or three more little suggestive symptoms. Added to these a disinclination for food amounting to loathing—the stomach rejecting, perhaps, the blandest thing that can be swallowed, but generally only experiencing nausea without emesis; a diarrhœa apparently due to utter languor of the intestinal canal; a constant tendency to sleep, but never so soundly as not to be disturbed by the ordinary noises; a pettish temper that will not be soothed, even when the patient's own whims are promptly gratified; in the older patients, a sort of provoked energy, or whipped-up animation, arising from youthful pride, that will not willingly yield to the tendencies that invite decubitus; urine always scanty, of high specific gravity, acid in reaction, and loaded with the urates, oxalates, and sometimes the phosphates. With these symptoms, grouped at all characteristically, though some may incidentally be absent, the case is one that demands every effort within reach to determine what is lurking ready to spring up and bear down the victim. Something certainly is gathering force for manifestation; and this remarkable congeries of symptoms constitutes my grounds for suspicion.

With several characteristic elementary symptoms of diphtheria present, and with my test also responded to, it was not necessary to await the supervention of possible sequelæ of a lucidly distinguishing type, by which to recognize my cases as those of veritable diphtheria. This simple plan of testing the constitutional presence of the specific poison of diphtheria was looked upon by the parents and friends as "a new sort of vaccination," as they styled it, and created a degree of hope for the final safety of the patient that it was not always desirable to attempt to dispel. It gave rise to the frequent necessity, afterward, of explaining the object of the act, as many deemed the disease readily preventable by some method of inoculation or prophylaxis known to the dispensary physician.

This reminds me that I have seen a slight wound on the leg of an adult take on the character of a vaccine pustule after a re-vaccination, and run its course perfectly, though very remote from the point where absorption of the virus took place; and at the same time the point of introduction showed no irritation beyond that caused by the scarification, and healed promptly. It would seem to be a reasonable conclusion that a specific poison, after permeating the whole system, will often manifest its presence by an election of site for its peculiar superficial local action, and preferably some very thin tissue in a morbid state, or an already denuded surface.

The appearance of pseudo-membranous exudation upon parts remote from the naso-pharyngeal surfaces after some induced lesion of insignificant extent, I regard as a sign at once diagnostic of diphtheria, and differentiating between it and any form of membranous croup. It will often demonstrate the true character of the pending malaise before the throat lesions have passed beyond their congestive and ill-defined catarrhal stages to become, at the last, covered with patches of false membrane. This test should, I think, tend helpfully towards settling the question of the individuality of diphtheria as regards its relations to any form of croup.

Having such a means at my disposal of verifying my diagnoses, I was not at a loss how to act; and need not adopt, of necessity, a passive and expectant course, which, in this disease, would be likely to be attended by serious, if not fatal, consequences. This

was a saving of valuable time that cannot be overrated in its importance. I would say, parenthetically, that it has enabled and induced me to be, what to many appeared singularly and unwarrantably positive in my diagnosis of cases in which the question of diphtheria or no diphtheria was anxiously debated; and my uncertainties have not been so frequent as my test has been satisfactorily demonstrative. I have not been able to detect an additional danger to the patient due to this method of experimentation; for on exposed cutaneous surfaces the inflammation and exudation does not extend beyond the limits of tissue injured by the knife, and does not at all complicate the case.

The list of cases is as follows, and the dates given are those upon which the nature of each case was positively determined:

February 5th, 219 W. 32d street, American family named Joice, two cases—John, æt. 6; Mary, æt. 8.

March 18th, 451 W. 28th street, American family named Downing, one case—Francis, æt. 10.

March 25th, 365 W. 31st street, Irish family named Burns, one case—Margaret, æt. 12.

April 8th, 418 W. 29th street, Irish family named Cassidy, four cases, but excluding the father, three cases—Annie, æt. 6; Joseph, æt. 12; Maggie, æt. 14.

June 3d, 518 W. 30th street, American family named Lockman, one case—Charles, æt. 5.

Same date (June 3d), 115 W. 33d street, American family named Farenback, one case—Kate, æt. 11.

June 3d, 443 W. 33d street, German family named Bechtel, one case—John, æt. 12.

August 24th, 553 W. 32d street, German family named Laybirtch, one case—James, æt. 5.

Same date (August 24th), 441 W. 32d street, Irish family named Farrell, one case—Owen, æt. 6.

September 10th, 531 W. 30th street, American family named McLee, one case—Lizzie, æt. 5 months.

Same date (Sept. 10th), 533 W. 30th street, Irish family named McGlewn, two cases—Rose, æt. 3; Sarah, æt. 12.

September 20th, 508 W. 29th street, English family named Borie, one case—George, æt. 4.

September 29th, 411 W. 32d street, Irish family named Heffern, three cases—Kate, æt. 4; John, æt. 3; Mary, æt. 18 months.

November 15th, 819 W. 28th street, American family named Tait, one case—Mary, æt. 1.

There were ten cases in Irish families, seven in American, two in German, and one in English. There were eleven girls and nine boys. The ages ranged from five months to fourteen years. Thus, there was one at five months, one at a year, one at eighteen months, two at three years, two at four, two at five, three at six, one at eight, one at ten, one at eleven, four at twelve, and one at fourteen. The oldest and youngest were girls; one of the three, one of the six, and one of the twelve-year old were girls,—the youngest three were girls.

I had early cognizance of these twenty cases; and, with the exception of the five-month old infant, and the two cases that never showed throat symptoms, I was under full headway in treatment before the pseudo-membrane had invaded the classic region of diphtheritic exudation, viz: the respiratory passages. An exhaustive review of all the points in these several cases, concerning which I have made very careful memoranda, would render my paper too categorical and unwieldy. I will therefore generalize the facts, and intimate in simple terms, the normal conclusions arrived at.

The symptoms which characterized these cases, with little or no variation, were the following, which I am sure you will recognize as belonging in their order and quality, pre-eminently to diphtheria. In every case there was to be noticed a precursive deterioration of constitutional vigor, shown as well by all signs of impaired vitality, as by a history that proved such to be the case. Not in any case, however, did the diphtheritic attack supervene directly upon an attack of measles, scarlatina, pneumonia, or during convalescence from any definite sickness. I never found a case concerning which I could determine a rugged or average condition of good health and bodily strength for any period within two months of the attack, though there was no positive disease deemed sufficiently urgent for medical treatment during that time. In all cases, save five, among the very youngest, otalgia was the first symptom complained of, and in several instances, this painful state of the aural nerves was so acute as to drive the patient into almost a frenzy. It was during this attack, which was only of a few hours duration, that the tumefaction of the lymphatic glands of the neck first became noticeable, and to these some of the pain seemed to be transferred.

Sometimes the submaxillary, and sub-mastoid, and sometimes the cervical glands became painfully enlarged, and, at times, all these glands would be swollen and painful together. There was invariably not only a loss of appetite, but a positive abhorrence of food, and no nourishment would be taken voluntarily, nor indeed without either exhausting persuasion, enticing reward, or threat of punishment. Vomiting, whether as a pathognomonic symptom or an occurrence due to the unwillingness of the stomach to perform duty in the absence of any aid from sentiment or agreeable nerve action, in these particular cases occurred early, and sometimes called for treatment in order that nutriment thus painfully taken need not be altogether wasted by its immediate ejection. Diarrhœa was a more or less troublesome symptom for the first two or three days in nearly every case. The body-temperature, until reduced by hygienic and other means, ran almost uniformly high for fifteen or twenty hours— 104° , 105° , 106° and 107° F., being the degrees reached, but not usually maintained for an hour. This I would have regarded as an unfavorable symptom, and calculated to be introductory to rapid enervation and early collapse, had I not providentially at my command means to equalize the pulse, steady the heart's action, and sustain nerve force through this brief paroxysm and riot of distressing symptoms. It was the vacillating and infrequent pulse, and the depression of the heart, that succeeded this riot (and which gives diphtheria its characteristic gravity), that every means was employed to counteract before it had ushered the patient into actual collapse.

Heated urine revealed the presence of albumen in every instance when tested as early in the case as the first specimen of the water could be obtained. The quantity of albumen would vary within wide limits and never increase, but always diminish from the time of the first examination, which I regarded as affording good hope from the outset for the efficacy of my treatment. In about ten hours after the abrasion, made by the knife to test the presence of constitutional diphtheria, the patches of pseudo-membrane would show themselves upon the excoriated surface, and also (if to appear there at all), upon the tonsillar and faucial surfaces. Under these conditions, the asthenia would be most marked, but apnœa was not even seriously threatened, for reasons

that will be apparent before we have concluded our review. Thus it will be seen how little room there was to mistake the nature of the disease in these cases; even without a resort to that test method which seemed to make assurance doubly sure.

All that constituted evidences of the disease were gone by the eighth day in all my cases, save two, and these were strictly convalescent on the tenth day in one case, and on the twelfth in the other. No paralyzes, organic perturbations, nor defluxions followed these cases, which fact, taken in connection with the evident shortening of the duration of the attacks by from two to four days, and the recovery of all, gives additional testimony concerning the efficacy of the treatment adopted, and the correctness of the views upon which that treatment was based.

It is certain that the prevailing hygienic influences were not such as would have been peculiarly liable to induce the appearance, and the epidemic continuance and spread of any form of zymotic disease. This must be true, as no zymotic nor malarial diseases were more than incidentally to be found recorded among my Dispensary cases during the year, let the prevalent hygienic influences have been what they may. My diphtheria cases were sporadic as regards the individual first attacked in a family, and limited to the families in which they occurred for whatever of epidemic power they were able to display. Every condition from the amount of air space belonging to the patient and to the family, to the quality of the meat and other things brought in to supply the family table, were noted with critical attention. The character of the season, the character and disposition of the patient, as far as it could be determined; everything of sanitary importance, from the roof to the cellar, from the street to the remotest corner of the lot, above the soil, below the soil, temperature, humidity, influences meteorations, and influences telluric, were scanned with a thoroughness and discriminating care, that would seem quite sufficient to detect the mystic condition qualified to excite any variety of epidemic. That in a section of the city so densely populated as the second district, several individuals should be suffering from the same form of disease, at about the same time, or at periods of time that made the cases successive and continuous during several weeks or months is not at all surprising. Every square in this part of the city, has a popula-

tion almost in excess of any village one can name, with front and rear houses in close juxtaposition; mammoth tenement structures overshadowing low hut-like shanties; every square or solid block averages one hundred dwellings, one thousand rooms, and three thousand occupants, of all ages and conditions, habits of life, and states of personal purity and health. Consider this cosmic medley of dwellers, who are realizing all that, to them, is *home*, within a superficial area of earth's surface, contained within 200 by 800 feet from curb to curb; multiply this by 42, and we have the whole area of the district in which there occurred twenty-one Dispensary cases of diphtheria in one year. Taking one such block, it is easy to form a very just estimate of the proportion of persons in the three thousand dwellers, who are imparting deleterious influences, rather than such as are salubrious to the surrounding atmosphere. Even the women by reason of their unrelieved domestic vocations, saturate home with their personal as well as their moral self; and by this, I allude to their frequent puerperal confinements, and oft-recurring catamenial impurities, their ignorance and disdain of the simplest principles of diet, ventilation and cleanliness. Then consider the invalids, both temporary and confirmed, of either sex and all ages, yielding all varieties and degrees of foul emanations and exhalations, and we have a laboratory of noxious agencies that must exert a potent power for evil with which *vis-medicatrix naturæ* is scarcely sufficient to cope.

Notwithstanding all that, I claim that there were no specific germ influences at work to create that distinct form of disease known as diphtheria. There were, however, the steady, unrelieved, subtile and undermining influences of incorrect living, and the continual imbibition of pernicious death-engendering *debris* of hundreds of indisposed, unsavory people, with their untidy apartments and clothing, and with animals innumerable in the same unwholesome condition.

This statement of fact, and belief upon evidence, has brought me squarely up to the principal proposition that this paper was designed as a medium through which to offer, viz: that diphtheria is, in all probability, an *autochthonous* disease, and I am even prepared to accept the doctrine that it is an *homo-autochthonous* disease. The application of the term, in this sense and relation,

is not at all forced nor incongruous, and expresses, to the letter, the sense in which I am disposed to view the origin and nature of this woeful disease. The original sense of the term as employed by the Greeks, was a positive absurdity, excepting perhaps in the case of the first man, Adam, of whom they knew nothing, but it is peculiarly appropriate in its application as used in the scientific sense.

I will not, however, at this point, attempt to defend the proposition offered, as it would interrupt that order of thought and statement that belongs to the history of my cases. But it surely is not amiss to reveal the character of the impression that I entertained, as it gave the bias to the treatment adopted, which served so well in these cases.

Since writing the foregoing, I have seen what the "*Medical Record*" of March 26th, 1876, has published, relating to the experiences of Dr. C. E. Billington, concerning the treatment of diphtheria as detailed in his paper, read before the New York Academy of Medicine, March 16th, 1876. As Dr. Billington's cases were derived chiefly from Dispensary practice, and as they occurred mostly, if not altogether, in the year 1875, the correspondence as to type and time render a comparison of modes of treatment and results of considerable interest, while not essentially interfering with the unity of narrative, nor with what I have undertaken to demonstrate.

My cases were in the twentieth ward, and Dr. Billington's in the twenty-first ward.* His claim for the verity and gravity of his cases will as readily be granted in the cases of the twentieth as of the twenty-first ward. Dr. Billington stated that the object of his paper was to contribute to the proof of the doctrine that the primary disease was a local affection and the source of constitutional manifestations. The object of my paper is to contribute proof of the doctrine stated in terms precisely the reverse. Dr. Billington admits that there were many cases which seemed difficult to explain upon this theory, *i. e.*, the local character of the initial stage of the disease. I claim that Dr. Billington's theory cannot be maintained by any natural and just interpretation of the circumstances attending my cases.

Dr. Billington's scope of observation seems to have been far

*Opposite sides of the city.

greater than mine, for besides his own cases, numbering 150, he had the benefit of memoranda to the number of 150 more. Of his Dispensary cases, 124 are reported, with 90 recoveries. Of these, 102 were under Dr. Billington's care, and 88 recovered. As all of my 20 cases recovered, it is clear that I was favored with greater success with treatment, based upon an assumption totally opposite to that held by Dr. Billington. There is, however, a certain approximation in our tenets of treatment that is a little remarkable, considering how widely we differ concerning the characteristic course and derivation of the disease.

Dr. Billington sought to show that his doctrine was confirmed by observations grouped under three heads. Under the first head, he admits certain constitutional cases, but denies that they were primarily constitutional. My cases were all constitutional when first recognized as diphtheria, and therefore the severity of the local affection as depending upon the presence or non-presence of the constitutional disease, has no place, as a question, in the exhibition of my cases. The second head simply reiterates the doctrine to which he adheres upon the basis of his own personal observations. Under the third head, he remarks that the result of treatment on the principle of local disinfection strongly confirmed his views. The result of treatment on the principle of constitutional revision, purification, and efficient support has strongly confirmed my views. Lacking any percentage of failures, I present all my cases *living witnesses*.

Dr. Billington's indications of treatment were

1st. "To destroy the contagion." Mine to nullify the power of the pervading poison, by antagonizing or eliminating it.

2d. (With Dr. Billington), "to subdue the inflammation, which was most effectually done by removing the cause." With me, remove the cause and the inflammation will not appear, or will only appear to promptly disappear by spontaneous decadence.

3d. Dr. Billington says: "combat the absorption of the poisonous element from the spot at which the local disease was manifested." I would say, purge the poisonous element from the physical economy, and the local manifestations will be altogether unimportant in any respect. The local manifestations will be as far as possible from dangerous, either toxically or mechanically.

Dr. Billington sums up in words to this effect: *local disinfection is the proper treatment for diphtheria*. Our respective theories are radically opposed. In the weight of evidence it would seem that *numbers*, from which to gather concurrent testimony, are in Dr. Billington's favor, but the mortuary list is rather more in favor of the arguments herein presented.

One or two points of similarity in our cases might here be mentioned. One is that the majority of all Dr. Billington's cases occurred in patients under twelve years of age. All but one of mine were twelve or under. Another point, is that the average duration of his cases was from four to six days, which exactly corresponds to my experience.

This comparison of views would have been out of place had not Dr. Billington's presentation been of such startling significance under any prepossession whatsoever, whether correct or the contrary. His treatment certainly was neither irrational nor inefficient under the dictation of his special views, and remarkably fortunate as regards results in the opinion of those who consider his theoretical views as untenable. Finally, as regards Dr. Billington's paper (it being the most recent and candid clinical contribution to the subject of diphtheria that I have seen), what has thus been said in contradiction and criticism, would be an inexcusable digression did not the comparison herein drawn serve well to define my own views. It will possibly also serve as a substitute for many minor digressions into which I might be tempted in the detailed statement of treatment according to my ideas of the character of diphtheria, and its obvious demands at the hands of the medical practitioner.

My plan of treatment was as follows: My first intention was by a vigorous blow which should resound throughout the whole system, metaphorically speaking, to abort the disease. To accomplish this, I made use of calomel in one courageous dose, given the instant I had decided with what I had to deal. My dose was never less than ten grains, excepting in infants under one year of age, nor more than thirty. Mixed with pulverized sugar, it was given dry upon the tongue and the mouth was well washed out after it had been swallowed. The action of this agent must be exclusively through the medium of the *primæ viæ*, lest a vicious secondary action should be instituted, which would

counteract all the good that this masterly sedative and efficiently alterative dose was designed to accomplish.

My next intention was to supplement the action of the calomel by a diaphoretic, which should be of a rallying rather than depressing nature. Therefore, in two hours after the administration of the mercurial, I gave doses of sulphate of quinine combined with Dover's powder, one grain of quinine to three of Dover's powder, excepting in children under a year old, every hour until I had secured ample diaphoresis, though without exhaustion, which happened commonly after the second or third dose was given. After this effect was realized, I continued to give the quinine and Dover's powder at intervals of two or three hours for perhaps twelve hours longer.

My next intention was to keep up a fair amount of sustaining influence by means of medicine which should at the same time be depurative. This I accomplished by the use of the "Elixir Iodo-Bromide Calcium Compound," a valuable general tonic alterative; having tonic, resolvent, diuretic, and aperient properties to a degree quite apparent to any one who has thus used it. This preparation I was induced to use after hearing it favorably mentioned by several medical gentlemen, whose experience and opinions I respected very highly. I gave an average dose of a teaspoonful every two hours at first, except in cases of less than one year, and after a while, every three hours until convalescence was established. Whenever not too obstinately opposed by the patient, I mingled the elixir with water and used it as a spray for the throat, and not unfrequently as a gargle, whether patches were present or not. Beyond this measure of local treatment I attempted nothing in that direction, indeed nothing more was ever needed; for when sloughy patches appeared they seemed to have but a feeble tenure of attachment to their beds, and loosened with great readiness.

Milk was the chief and often the only nutriment throughout the entire illness, and about the third day after the calomel had been taken it was rendered slightly stimulant with brandy and refreshing to the palate with ice. From this I gradually allowed the use of the common sick-room preparations of milk, such as wine-whey, syllabub, ice cream, &c., if the appetite favored their employment. Iced-champagne was invariably used and relished

during the stage of dawning convalescence, I took care to have it always at hand as it was a gift from generous donors on the doctor's requisition.

Lastly, to complete the outline of treatment and as a balm to the wounded prejudices of the disinfectionists, I invariably bathed the entire person of the patient with a tepid lotion of water and salicylic acid (acid $\mathfrak{z}\text{j}$ to water $\mathfrak{z}\text{j}$), as often as thrice in twenty-four hours, and if enjoyed, then very much oftener. The absorption doubtless benefited the patient, the diffusion to some extent in the atmosphere benefitted the attendants, and the method doubtless served faithfully in the realm of prophylaxis and general disinfection.

All details of treatment beyond what I have specified were the commonly employed agencies and devices of the sick-room to procure comfort for the patient. Not a jot of needed care concerning temperature, ventilation, quiet, proper, and timely needed diversion, etc., was neglected in these cases within practicable limits, as everything was deemed of almost essential importance in its relation to the management of this terrible disorder.

It must not be supposed that the Dispensary furnishes me with the medicines and delicacies required in the treatment of these cases. The little that I needed in these few cases was readily enough obtained independently of the dispensary supplies.

In deference to the views of those who entertain convictions of the portable and actively diffusible property of diphtheritic contagium, I refrained, as much as possible, from sending to the Dispensary those who were in attendance upon the sick. Two years ago I entertained without misgiving, a belief in the intensely contagious and actively portable nature of the diphtheritic poison, and strongly advocated the peremptory isolation of all cases by legislative enactment, so that it might be "stamped out." I am not disposed to be a supporter of such radical ideas any longer.

Probably, even the present conservative generation of medical men are sufficiently well acquainted with the physical effects of calomel in extra liberal doses to juvenile patients, to make any special pleading in defence of this agent, so used at the outset of diphtheria, quite superfluous. Still there are certain points,

which, if not lost sight of, nor discredited by those less familiar with the incipient symptomatology of this disease, will go far towards ratifying the use of calomel in the way herein proposed. At any time in the course of diphtheria, previous to a possible collapse of all nervous power, there is a gradually increasing depression of nerve force that is scarcely betrayed by the action of the heart and the corresponding efferent circulation. The heart alone seems to be under an abnormal stimulus, and although its actual beat and consequent arterial pulse volume may not be much if at all in advance of the normal average, still, as compared with the state of genuine nervous vitality possessed by the patient, it is relatively vastly in excess of all due proportion. A heart goaded by disease into action that is relatively greatly beyond the powers of all the co-ordinate organs and their responsive functions—though, in itself considered, such action may be only a trifle beyond what would be the standard of normal and healthy rhythm, is a heart that is wearing itself out by work both exhaustive and fruitless. Such a heart ought to be curbed in by a prompt and effective restraint, until its functions more nearly coincide with the powers of nature (such as they are), after which all organs and functions will, in unison, partake equally of the benefit of wholesome stimulation. Action and re-action will become fairly balanced, and no harm will ensue. There is therefore, whatever may be the actual force of the arterial circulation, the same disproportion between it and the real nerve force possessed by the patient. This consideration consequently puts the actual state of nerve vitality early in diphtheria, at an alarmingly low level. It is when the heart and pulse can no longer keep up this fictitious condition, this semblance of health and assertion of power not really possessed by the system, that the dreaded collapse comes on so suddenly and so disastrously. Nothing in disease is so deceptive as the pulse of diphtheria in the first stage of the malady. What then is left to do, but to disarm this lurking disease of its mark, to bring all the functions of all the organs as speedily as possible into something like their true and proportional relations, and then to start them off on an even and gently increasing pace towards the normal level? This I claim to be the great office of calomel in this worst stage of the disease diphtheria. I have only to turn to my old text-book, viz: Beck's

Materia Medica and Therapeutics, to find abundant confirmation for the estimate in which I hold calomel in just such a necessity as this disease presents.

Concerning the intermediate treatment between the calomel and the combination of bromine, iodine, lime, &c., the following are noticeable facts: re-action begins as soon as the calomel has grappled with the nerve centres, which regulate the heart's action, and the sedative principle established is reinforced by the quinine and opium. This latter combination acts as a general sudorific and depurative, while it is none the less efficacious as a tonic and supporting agent.

With reference to the combination of lime, bromine, chlorine, iodine, &c., in an elixir, at once pleasant to the taste and very legitimate in its therapeutic action, I have this thought or two to offer out of many that present themselves. Iodo-bromide calcium compound is stated by the manufacturing druggist to be composed of a solution of bromine, iodine, chlorine, calcium, magnesium, iron, sodium, and potassium. It is probable that there is only a partial chemical union in this solution which, however, would be equally true of many of the spas and mineral spring waters, though the efficacy of these waters is due to the presence of certain of the constituent parts, and is not thereby in the least impaired, and not unfrequently it is enhanced. It is very certain that this elaborate composition acts as a very prompt alterative where blood impurities are the occasion of illness: also as a stimulant where relaxation of muscular tissue is due to blood alteration; also as a supporting agent in supplying fresh elements of a reliable character to the blood (nutrient elements in fact); and also as a tonic to the lagging secernent system. No shadow of claim ought to be set up for this preparation as a specific in diphtheria in any other sense than as supplying, in ready combination, and in convenient and sufficient bulk, the exact elements required to antagonize the toxic influences of the poison, and as supplying the elements lost to the system by perverted action. It ranges throughout the physical economy, adjusting differences and compensating for losses. What more can be required of a medicine? Not a component of this preparation is superfluous in the light of the recently instructed opinion of the profession of the needs of the constitution under the spell of this

disease. Bromine, iodine, calcium, chlorine, iron and potassium, are each specially lauded as of the first necessity in the treatment of diphtheria, and in this mixture we have each of these elements admirably combined. The prompt action and efficiency of this medicine, quite as much as any other fact, points to the constitutional nature of this disease from its incipency; for in the stages *post pyrexia*, it has in my hands continued and consummated the abortive line of treatment. No persistent and rapidly spreading faucial, trachial, or naso-pharyngeal exudations take place, and what diminished exudative membrane does appear will rapidly disappear. Used in advance of the most serious local complications, life must, almost as a matter of course, be saved; and under such favorable circumstances, this medicine approaches as nearly the rank and dignity of a true specific as any, which this, our scientific branch of the profession will, at present, be likely to acknowledge.

General Nature of Diphtheria.—I will now close this paper with a brief recital of my impressions relating to the general nature of diphtheria as derived from, and confirmed by the close analysis of all the cases I have ever had, and the definite results of an experimental line of treatment in the Dispensary cases of 1875.

Firstly. I incline to the belief that malarial conditions are probably not even the predisposing causes of diphtheria—much less the actual or immediate causes. Like conditions produce like results, especially in like constitutions, and this must be notably true of families, each member of which is as much a part of a given whole, as a nut which has been cracked and the meat divided. Exceptional circumstances may exert favorable influences over certain individuals in a family; but with a family, a spreading malady for one member is practically a malady for all, in major or minor degrees. Conditions similar in kind, may aid a disease in invading other neighboring family circles, and in this light, we must view diphtheria in its epidemic entirety. It neither depends upon, nor is propagated by a specific contagion received from without. Certain septic influences, more or less specific in character, may be received from one by another when the common lot, and family, or even communal dyscrasie are similar. How dissimilar to scarlet fever, for instance, is this

modest aggressive property! It will yet be proved that diphtheria is no more subject to be epidemic than, for example, an unripe fruit colic, though like the latter disorder, it may prevail extensively when all the circumstances are favorable. There is, perhaps, no form of noxious influences that would not be more or less conducive to a visitation of diphtheria; and an impaired and badly sustained system, immersed in prevailing poisonous influences, would undoubtedly be a fairly inviting field for diphtheritic operations. The greater susceptibility of young children is due, undoubtedly, to the same conditions which render them so susceptible to "summer complaint," and the zymotic affections.

We do not commonly speak of *cholera-infantum* as an epidemic, even when it is the most rife, for we know that like conditions similarly affect like constitutions, and many, as a consequence, must be swept out of life.

Secondly. Diphtheria is probably not only autochthonous but homo-autochthonous. The infrequency, non-contiguity, and slow multiplication of my cases forbade a suspicion that the disease should be regarded as an epidemic; and the absence of all acknowledged epidemic diseases in the district at the same time, equally forbade attributing this disease to influences that generate the common epidemics. Every possible scrutiny was exercised in regard to the immediate sanitary conditions of the premises and the neighborhood, wherein a case of diphtheria was discovered, and in every instance, utter failure to fasten upon one sufficient local cause was the result. By the convenient method of exclusion; we are compelled to fall back upon the indigenous and idiopathic character of this poison. All writers claim that there must be a condition of the system favorable for the development of diphtheria. Then why, of necessity, look further than this sufficiently favorable condition for the production of this disease? Trousseau and others failed in their attempts to inoculate themselves with the poison of diphtheria. Of course, their systems were not in a favorable state to take the disease. In a sufficiently favorable state, diphtheritic inoculation would not have failed, nor would such an operation have been necessary to have effected their object. It is rarely, if ever, inoculable and communicable, excepting within limits such as have been defined. By like tokens, we are justified in regarding

diphtheria as belonging exclusively to mankind, or in other words, *homo-autochthonous*. Bretonneau quite failed in his endeavors to infect the lower animals with diphtheria, and we learn from trustworthy veterinary surgeons, that they cannot affirm, but only suspect that domesticated animals are not unliable to the infection. Certainly there are no generically similar constitutional conditions between man and the brute. Scarcely can there be said to be identical conditions in a general sanitary sense. That there is an equivalent disease due to approximatively similar conditions for the brute, it is very easy to conceive; and probably there is some modified form of disease that might be called equine, or bovine, or canine, or feline diphtheria, as the case may be. Still the diphtheria of our medical literature is a *homo-autochthonous* disease, neither received from, nor transmitted to the creatures of the lower orders. It must be a disease peculiar to the *genus-homo*, and due to a conjunction of favorable circumstances.

Clinical observers have discovered no appreciable deviations from a common average rate of progress, in any disease that they know to be received from without, such as small-pox, syphilitic infection, &c., &c. But in this disease, the period between the reception of the disease germ, and the manifestations of the disease (according to those who believe in the germ and migrating theory), have never been settled by a united opinion. One to fourteen days is the margin allowed in absolute ignorance of the facts.

The peculiarities of the initial fever, already specified, are phenomenal in diphtheria, and would point to causes different from those that would obtain in diseases usually received from outside sources, like, for instance, the eruptive diseases of the zymotic order.

Thirdly, and lastly, diphtheria yields to treatment more uniformly, when treatment consists of emphatic and radical measures of an alterative character, with sufficient compensating constitutional support. Undoubtedly such measures are practically if not technically abortive.

Explanatory Note.

Mr. Editor: Permit me to give publicity, through your journal, to the following statement, that will doubtless interest the profession to the same degree that it has been interested in the action of the New York State Medical Society, in regard to my paper. In the first place, permit me to call attention to the fact that when my paper was read, contrary to all custom and precedent, the discussion was postponed until sometime indefinitely in the future. Had the discussion followed immediately upon the reading of the paper, I would have been present to have participated, and certainly could have said what I herein offer in my own defence. I was not notified when to expect the subject of the paper to come up for consideration, and having no apprehensions of unfavorable criticism and action, I felt under no obligation to be constantly in attendance. It was, however, during a brief absence from the Society that the matter was taken up and summarily disposed of in a way calculated to cast discredit upon a fellow delegate.

In the second place, the motion to exclude the paper from the printed Transactions of the Society was made by Dr. E. R. Squibb. The ill-grace of such a motion by Dr. Squibb will be instantly apparent when we reflect that he is not a practising physician, and hence is not qualified to criticise any point in my paper. Again, it ought to be remembered that he is not amenable to the Code, as governing the action of physicians, and hence he is not one whom the Code ought to concern in any possible way. Again, Dr. Squibb is a manufacturing chemist, whose medicines, upon the market, are as conspicuously marked "Squibb's," and with as much advantage to the proprietor as any manufacturer of drugs could desire. The "live and let live" principle is not one of Dr. Squibb's cardinal virtues. His eminent fitness to act as mentor-general in questions of ethics is an opinion not shared with himself by the profession at large.

It now remains to say a few words in explanation of my action, which, if known by the Society, would probably have modified the attitude toward my paper. When in Albany, early in 1874, I was presented with a sample specimen of Tilden & Co's. "iodo-bromide calcium compound," by a medical gentleman, who said that he had received it during a distribution of the samples in the State Medical Society. He said many members were going to take their specimens home and test them. I thought little of the matter until I became, with my family, a summer boarder at a village among the Berkshire Hills, near Lebanon Springs, in Columbia county, New York. During my vacation I had opportunities for visiting Mr. Tilden's coun-

try home and his laboratory for the manufacture of medicinal drugs. I then and there learned the formula of the "iodo-bromide calcium compound"—its mode of manufacture, &c. There was no pretence of secrecy, but on the contrary every effort was made to make me fully acquainted with the chemical data of this, as well as other preparations manufactured by the same house. I was shown a printed circular in which the formula is plainly given. I was now sufficiently interested in the medicine to try it, and in 1875 I did try it with a degree of positive success that more than equaled my expectations. Dr. Squibb's list furnished, at that time, no fair equivalent for this preparation. As for regarding it *proprietary*, that I did in precisely the same sense that Squibb's "liquor opii compound," &c., &c., are proprietary; but as for regarding it a nostrum and a quack preparation, fit only to be spurned by the high-toned physician, that I certainly did not. Why should I, considering the source from which I derived my first information concerning it, and my bias in its favor, and also considering that I had been made as well acquainted with its composition as the proprietor was, and as the profession had the opportunity to be?

Justice, consistency, and fair dealing demand that the vote of the Society at its next meeting be reversed.

GEO. BAYLES, M. D.

New York city, 39 W. 48th Street, July 18th, 1876.

ART. II.—*Valentine's Meat Juice and Glycerine in Cholera Infantum.* By J. W. McILHANNY, M. D., Physician in Charge of Bethel Academy, Warrenton, Va.

I desire to call the attention of the profession to the use of this most valuable food, tonic and remedy in cholera infantum. I have met with a large number of cases during the past two and a half months, and in *every case*, I have substituted it for pure milk, condensed milk, or other food usually used for this class of patients—excepting, of course, those foods which Nature has provided. Even in such cases, I have also given it with a view of assisting digestion. It has not failed in a single instance to arrest the vomiting and nausea within the shortest imaginable time, acting almost like magic—the first or second dose usually relieving these symptoms.

Of course I do not wish to be understood as not having used any other treatment. In some cases, I prescribed simple reme-

dies in connection with the Meat-Juice and Glycerine. My usual mode of administration, was to give *pure* Meat-Juice and Glycerine; say to a child six months of age, I gave from 15 to 20 drops, every three hours, and in some cases directed the following:

R. Hydrarg. chlorid. mit..... gr. j.
 Pulv. doveri..... gr. iij.
 Plumbi acetat..... gr. ij.
 Cretæ preparat..... gr. viij.

M. et. fit. chart No. 12. Sig. One to be given every three hours when necessary.

Or other preparations might be suggested by the symptoms as they arose.

I will state as briefly as possible the use of Meat-Juice and Glycerine in the above disease:

I was called in consultation to see twins, age five months. They were affected identically alike in every symptom. Finding them almost exhausted by vomiting and purging every few minutes—all other food as well as medicine being rejected—I suggested the Meat-Juice and Glycerine, in 15-drop doses, every three hours, with the above prescription; milk, and hot water tea, and all other nourishment to be discontinued at once. (Nature had not provided any nourishment.) The mother had charge of one—the little girl—an aunt the other—a little boy. The mother declared her girl should not have the Meat-Juice and Glycerine; the aunt, having more confidence, said her boy should have it. The violent symptoms in his case were arrested in less than six hours; the little girl continued to grow worse, when, at last, the mother thought it prudent to change her mind, and consented to give it as directed. Happily, the symptoms (now much more aggravated) in the case of the little girl were relieved. We gradually increased the Meat-Juice and Glycerine to 20 drops every three hours. This was the only food allowed them—except for a few days—when they were again placed on the milk and water diet (owing to our not having the Meat-Juice and Glycerine). During the short period of the use of the milk and water diet, they relapsed, and were not again relieved until the resumption of the Meat-Juice and Glycerine.

I cannot say how this preparation, so valued by me, will act in crowded cities; but I hope the profession will, at least, appreciate an unselfish motive, in my presenting to their attention, the use of Valentine's Meat-Juice and Glycerine, in cholera infantum, and that they will give it a fair trial, and not condemn it, if it should not in all cases prove so satisfactory.

For the past two and a half months, I have had the good fortune to have in my hands or possession, Valentine's Meat-Juice and Glycerine; and whilst using it in other cases, for which it is especially suited, according to my views, the idea suggested itself that it would also be a good food and tonic in cholera infantum, which disease has prevailed fearfully this season in our section. I have used it in every case that I have been called to (many of them), with the most unprecedented success—not failing to promote digestion, and to arrest nausea and vomiting; and, may I not say, that it assisted in this way in relieving the purging? This has also been the experience of my partner, Dr. Chilton, (a practitioner of thirty-four years experience,) who will endorse, if called on, all that I may say of it. I will say more. I have never seen the first dose fail, even where no other food was retained.

Under these circumstances, I desire to give the profession my experience through the September number of the *Monthly*, feeling that it is not only due the profession, but that, were the facts not made known, it would be manifesting marked want of gratitude to Mr. Valentine, who places this most valuable food, tonic and remedial agent in the reach of all.

ART. III.—*Ligation of Large Arteries, during and since the late War, for Secondary Hæmorrhage—Cases and Remarks.* By THOMAS B. WILKERSON, M. D., late Surgeon Confederate Army; Young's Cross Roads, Granville Co., N. C.

Case I.—Lieut. A., Mississippi regiment, C. S. Army, was wounded at the second battle of Manassas, 1862, by a minnie ball, which passed through the fleshy portion of the right thigh at the junction of the upper and middle thirds, and entered the limb in the line of the femoral artery. This man bled freely on the field. The hæmorrhage had been arrested by his surgeon before his admission into the hospital at Aldie, by a compress wet in muriated tinct. iron. A tourniquet was loosely placed around the limb above the wound, and his attendant was directed to tighten it, should bleeding commence again.

On the sixth day after admission free arterial hæmorrhage set in, but was quickly arrested by the tourniquet. I saw him a short time after the last bleeding, and determined to ligate the femoral artery. Chloroform having been given, assisted by Dr. Collins,

I made an incision three inches in length in the line of the femoral, guided by the groove between the sartorius and vastus internus muscles, dividing skin, superficial and deep fasciæ, avoiding the saphena vein; the sartorius was drawn upwards and inwards, and the large mass of clotted blood turned out. I then secured by ligatures the divided and retracted ends of the femoral artery. The wound was freed of all coagula and closed by the interrupted suture. The limb was wrapped with warm flannel and bags of wheat bran, kept warm, placed along the limb on each side, with a warm rock to the foot. He was given tinct. ferri. chlorid. and quiniæ sulph. thrice a day.

This officer made a good recovery; ligatures separated on the eighteenth day; no hæmorrhage after the operation; collateral circulation in the posterior tibial noted on the fourth day.

Case II.—Private B., North Carolina regiment, C. S. A., wounded near Jordan's Springs, Va., 1863, by a conical ball, which ranged obliquely through the left thigh, entering the limb near the lower edge of Scarpa's triangle, making its exit on the posterior surface. There was no hæmorrhage of note at the time. On the fifteenth day after admission into hospital, whilst making a slight exertion in turning over on his cot, profuse secondary hæmorrhage of arterial color set in from the anterior wound. I was hastily summoned. Whilst compression was made on the femoral near the groin (the patient being under chloroform), assisted by Surgeons Newton and Hagy, I made an incision three inches in length along the inner border of the sartorius, through integument, superficial and deep fascia. The latter was found very much thickened, and there was a general infiltration of the tissues surrounding the femoral artery. The ball had apparently not divided the vessel in its passage, but had done such an amount of injury that suppuration afterwards had destroyed the coats of the artery. Carefully breaking up the adhesions, both the proximal and distal ends of the divided femoral were drawn out by a tenaculum and secured by ligatures. The wound was closed by sutures and adhesive plaster, the limb swathed in flannel, and bags of warm bran laid along on each side.

This man had a slight attack of erysipelas, but under a generous diet, together with the free administration of tonics and stimulants, made a good recovery. Collateral circulation felt in the posterior tibial on the fifth day after the operation; ligatures came away on the nineteenth.

Case III.—Mike M., Federal prisoner, wounded and captured below Winchester, in 1864. The wound necessitated an ampu-

tation of the thigh in the middle third, after which he was transferred to Mt. Jackson Hospital, and did well until about the fifth week. The stump had healed, except about half an inch, which was suppurating. At this time a profuse secondary hæmorrhage set in from the stump, which blanched the cheeks in a few minutes; but by the timely arrival of the ward surgeon the bleeding was arrested. I saw him soon after. Assisted by Surgeon Allen, of the University of Virginia, and Surgeons Sawyers and Williams, the man was put under an anæsthetic. I ligated the femoral by making an incision three inches in length, and about the same distance from Poupart's ligament, along the inner border of the sartorius, dividing the integuments down to the muscle; the latter was drawn outwards, the sheath of the femoral opened, and a ligature passed around the artery.

At this point attention was called to a singular anatomical anomaly of the femoral: there were two branches of equal size running parallel with, but one under the other. According to surgical authority, this departure is not often met with, but the attention of the operator should ever be on the alert to detect it. In this case, had the second branch not have been secured, the operation would have proved futile, and another hæmorrhage would have ended the life of the man. The man did well; the ligature separated on the twentieth day.

This was the usual course of treatment pursued by me in amputations, where any length of time had elapsed. Especially when there was union, to any extent, I ligated the main artery leading to the stump, rather than attempt the opening and breaking up of adhesions of the stump. The latter plan is frequently attended with fatal results, the patient dying from pyæmia. The breaking open of the agglutinated ends of divided veins and lymphatics appears to furnish a good nidus for the absorption of septicous matters.

Right here, let me call attention to a plan of treatment pursued by me with very flattering results during the late war. In amputations of large limbs, cut short the ends of the ligatures, leaving merely sufficient of the ends of the ligature to secure the knot in the loop. By this means a great and fruitful source of secondary hæmorrhage are avoided; for even in the hands of the most skilful dresser, the ends of the ligatures hanging out of the stump are liable to become entangled in the dressings, subjecting them to some traction. The traction may not be enough to directly separate the ligature; but in an enfeebled patient, in

one whose vital stamina is impaired, it may be sufficient to do such injury to the coats of the artery as to produce too early separation of the ligature, with secondary hæmorrhage as a necessary attendant. Even when the patient is quiet on his couch, there will be more or less spasmodic contraction of the divided muscles; and in the transportation of these cases on stretchers or by ambulances, the to-and-fro motion, in the most careful hands, will produce an undue amount of traction on the ligatures. It may be urged, as an objection to this plan, that the loops might be retained and become a source of after-trouble; but in the cases noted by me the ligatures came away readily in the secretions from the stump. By lessening the amount of foreign material in the wound, we thereby lessen the amount of suppuration; and no doubt one great source of septicæmic poisoning would be removed, for these strings are constantly loaded with putrid fluids acting as a hot-bed for their distribution. In this day of antiseptic mania, carbolized ligatures might be employed; or better still for the larger arteries, the wire loop. These might be retained without detriment to the patient. Admitting even that the ordinary ligatures as employed should be retained, it would be much better to be called on to open an abscess for its discharge than to have to meet a case of secondary hæmorrhage.

Case IV.—Private A., of a Virginia regiment, C. S. A., was wounded at the battle of Winchester, September 19, 1864, by a minnie ball, which passed through the right thigh about two and a half inches below Poupart's ligament, ranging obliquely superficially, wounding likewise the scrotum at its junction with the penis, and entering the left thigh about one and a half inch below Poupart's ligament, making its exit on the opposite side a little above the point of entrance. The man was under the care of Surgeon Duval, of Kentucky, and did well until October 19th, when Dr. Duval and I were hurriedly summoned, and found a large stream of arterial blood jetting freely from the inner wound of the left thigh. The man had fainted. I requested Dr. Duval to compress the femoral artery, and, without the use of chloroform, made an incision three and a half inches in length, commencing a little below Poupart's ligament, in the line of the femoral artery, dividing the skin, superficial and deep fascia, turned out the clotted blood, and found the sheath of the femoral vessels looking normal; but on searching along the inner and

upper portion of the femoral, breaking up some adhesions, the profunda femoris was discovered divided near its origin; a fibrous clot had been displaced from the distal and proximal ends. I passed a ligature around the femoral, both above and below the origin of the profunda, and tied the distal end of the profunda, closed the wound, and wrapped the limb in flannel, placing warm sand bags and bottles of warm water along the sides of the limb. An enema of whiskey, morphia, and sulphate of quinia was given, and after forty-eight hours a perceptible warmth could be felt in the limb; after four or five days a feeble circulation was discovered in the posterior tibial at the ankle; the ligature separated on the twentieth day; no bleeding. Under a generous diet and tonics he continued to improve, and recovered. My impression is, that the profunda femoris was divided by the ball in the first instance, and a clot had fortunately closed the divided ends of the vessel, and was unfortunately displaced; but it probably remained long enough to allow a partial collateral circulation to be established, and that contributed greatly to the fortunate result of the operation.

This is the only successful case of ligation of the profunda and superficial femoral that I have seen recorded in the Confederate army. In every instance of ligation of the primitive femoral for gun-shot wounds, death of the limb in a short time has been the inevitable result. This case was published in the October, 1875, number of the *American Journal of Medical Sciences*.

Case V.—Private F., Georgia regiment, C. S. A., wounded at Winchester, Va., September 19, 1864, by a minnie ball, which entered the right leg about three inches below the head of the fibula and a little to its outer surface, making its exit obliquely through the calf of the limb near its middle. There was but little hæmorrhage on the field. On the fourteenth day after admission into hospital secondary arterial hæmorrhage ensued, bleeding freely from both wounds. At this time the limb was very painful and much swollen. I saw the case in consultation with Surgeon James McGuire (the man being under his charge). From the course of the ball and the two points of bleeding, it was impossible to say positively whether the anterior or posterior tibial artery was wounded. An operation for the ligation of either of these arteries at this point, owing to the swollen and infiltrated condition of the limb, would have been attended with serious venous hæmorrhage. Viewing the case in this light, it was determined, as a dernier resort, to secure the popliteal. Assisted by Surgeon James McGuire and Dr. Miller (the man under the influence of chloroform, lying on his face, and the femoral

compressed), I made an incision about three inches in length along the outer border of the tendon of the semimembranosus muscle, dividing skin, superficial and deep fascia, pressing the tendon inward; the sheath of the artery was reached, opened, and a ligature thrown around the artery, carefully avoiding the popliteal vein. The wound was closed and dressed with cloths dipped in oil. The limb was wrapped in flannel, and warm bran bags were laid along each side; tincture of iron with quinine, together with a generous diet, formed the basis of treatment.

The man appeared to do well for five or six days; the limb greatly lessened in size, and there was perceptible warmth. There was no evidence of any inflammatory excitement about the knee-joint. On the 7th day after the operation the limb became cold, doughy to the touch, and of a piebald hue, changing rapidly to a dark color up to the knee. Death of the limb ensued, necessitating an amputation of the thigh in the lower third. The after-history of this case is not known, as I left Winchester about that time to be exchanged. This man was in a crowded hospital, surrounded by but few of the comforts so necessary in these cases, and he was of a naturally melancholic disposition, very much depressed in mind at the idea of being a prisoner of war. This no doubt had some bearing on the case, as most military surgeons have noticed that the wounded, and especially those cases subjected to capital operation, do much better in a victorious than those in a defeated army. The mortality list is greatly lessened when the spirits of the men are exuberant over the defeat of their enemy.

Case VI.—Capt. M., a German and member of a Federal general's staff, was wounded and captured at the battle of Cross Keys, 1862. A conical ball had entered the left foot near the fourth metatarso-tarsal articulation, passing through in an oblique line. On the fourth day after admission into hospital at Port Republic, profuse secondary hæmorrhage set in from the anterior wound. Not wishing to inflict further injury to the structures around this point, and believing that the numerous anastomosing branches given off at this place would render an operation for the arrest of the bleeding unsuccessful, I decided to ligate the posterior tibial, as this artery furnished the main branch to the wounded plantar arch. The patient was placed under the influence of chloroform, the limb everted, and the foot flexed, so as to make prominent the tendo Achillis. Assisted by Surgeon Hagy, I made a semilunar incision two inches in length nearly midway between the bony prominence of the os calcis and internal malleolus, dividing skin, superficial and deep fascia, when the sheath of the artery was found, opened, and a ligature passed

around the vessel by an aneurism needle. This officer did well; no after hæmorrhage; the ligature separated on the twelfth day.

The fortunate result obtained in this case is of great interest, owing to the uncertainty of arresting, and afterwards of preventing, recurrent hæmorrhage, by ligating the posterior tibial for wounds of the plantar arch. The anastomosing branch is supplied by the anterior tibial and peroneal arteries which renders the prognosis of an operation very doubtful. I rather expected in this case to be compelled to tie the anterior tibial, but in this, as the sequel shows, I was agreeably disappointed. He was carefully watched from the beginning to the time of final recovery, ever on the alert to meet any sign of recurrent hæmorrhage.

Case VII.—M. S., carpenter, colored, æt. 45, wounded himself, with a broadaxe, in the left leg near the middle of the limb, in 1867, whilst hewing a piece of timber for a house sill. The further point of the axe entered the soft parts about half an inch from the inner edge of the tibia, inflicting a gash about three inches in length. He stated that the bleeding was pretty free at the time the wound was received, but was controlled by the application of a compress saturated in tincture of iron. He did well until about the eighteenth day; he then began to complain of great pain at the seat of wound; the leg rapidly enlarged. On the next day after noticing these symptoms, secondary hæmorrhage commenced. The wound had nearly healed, a small orifice only remaining. I was sent for to see the man; found him very much exhausted by the loss of blood, constant retching, and vomiting everything taken into the stomach. The leg was very much swollen, hard and diffused; there was no pulsation perceptible in the posterior tibial. There was evidently a traumatic aneurism of the posterior tibial. The patient was given, per enema, 15 grains quinia and $\frac{1}{2}$ grain sulph. morphia, in two ounces of brandy. He was brought under the influence of an anæsthetic compound composed of chloroform one part, sulphuric ether two parts: the femoral was controlled by an assistant. I made an incision three inches in length, one-half in the middle third of the leg, half in the lower, and midway between the inner edge of the tibia and the inner border of the tendo Achillis, dividing the skin, superficial, and the deep fascia covering the tendo Achillis; the internal saphena was pushed to one side; the large mass of clots was turned out. At this stage of the operation, the hæmorrhage was very free, coming mainly from the divided distal end of the artery; this was secured readily by ligation. The cardiac portion had retracted into its sheath, consum-

ing some time in the finding and securing the artery, owing to the blood-stained, thickened, and infiltrated condition of the surrounding tissues. The wound was cleared of all coagula, and closed by the interrupted suture. He was given tonics and a generous diet. Under this treatment he made a good recovery. The ligatures came away on the eighteenth day. The artery was severed by the axe obliquely. Firm fibrous clots had formed in the divided vessel, but owing probably to an injudicious and too early use of the limb, had been displaced by the rapid current of blood in the artery.

Case VIII.—Private C., North Carolina regiment, C. S. A., was wounded at the battle of Winchester, September 19, 1864, by a conical ball, which entered the right leg in front about three inches below the head of the tibia, passing through the middle of the intermuscular space between the tibia and fibula, and making its exit through the outer part of the calf of leg. On the fifteenth day after admission into hospital, secondary hæmorrhage set in from the anterior wound. I determined to seek for the bleeding vessel. The man was placed under chloroform, the femoral controlled by digital compression; and, assisted by Surgeon Duval, an incision was made, four inches in length, midway between the spine of tibia and external edge of fibula, dividing skin and superficial fascia. The aponeurotic fascia was raised on a director, divided longitudinally and transversely at both ends of the incision. The line of the intermuscular septa was felt for, and the muscles separated with the finger. It was found very difficult to keep the wound open, owing to the rigidity of the opposing tissues; the edges were kept apart by bent spatulæ in the hands of assistants. After some trouble and delay, the divided ends of the artery were found lying on the interosseous membrane; they were taken up with a tenaculum and ligated; the wound was cleaned of clots and closed by sutures. This man was very weak from loss of blood and from the tedious nature of the operation to which he had been subjected. He was given stimulants freely, tonics, and the most nutritious diet that the stomach would bear. Suppuration was very free, and at first very offensive, but under the application of chlorinated soda wash the disagreeable odor soon subsided. He improved slowly, but finally made a good recovery. The ligatures came away on the twenty-first day.

The ligation of the anterior tibial at this point is attended with a great deal of trouble and difficulty—more, I think, than any other artery of the leg. The narrow, confined space intervening between the tibia and fibula, the dense aponeurotic fas-

cia, and the general obscurity in a blood-steeped limb of those guiding landmarks so plainly discernible in a healthy limb, render an operation for the relief of traumatic aneurism difficult in most cases, and especially so in the region above described.

Case IX.—Private C., Louisiana regiment, was wounded at Winchester, Va., September 19, 1864, by a minnie ball, which entered the right buttock a little below and to the outer side of the trochanter major, lodging against and a little to the outer edge of the sciatic foramen. He stated that his surgeon probed the wound and made some efforts to remove the ball with bullet forceps, but the attempt was unsuccessful; he further stated there was some bleeding on the field. After his admission into hospital, the wounded parts were found very much swollen and painful, giving rise to severe constitutional derangement. On the thirteenth day, profuse secondary arterial hæmorrhage set in. Judging from the course of the ball, it was evidently the gluteal involved. I determined to cut down on, and ligate the artery. Directing an assistant to make pressure on the right primitive iliac, while the man was under chloroform, assisted by Dr. Duval, an incision was made four and a half inches in length (the man lying on his face) a little below the posterior spinous process of the ileum, and about one inch from the sacrum, extending towards the great trochanter, dividing skin, superficial fascia, and the fibres of the gluteus maximus muscle. At this stage of the operation there was free bleeding from the divided muscular branches; these were immediately secured by ligature. The large collection of adipose tissue was then separated, and the dense aponeurotic fascia divided on a director; the clotted blood was turned out and the artery sought for; the main trunk of the gluteal was found partially divided by the ball just before its division into terminal branches. A ligature was passed around the main artery near the sciatic notch, and both of its branches secured by ligature; the artery was then divided between the ligatures; the ball was removed by forceps. This man was very fleshy, with a large buttock, and the ghastly character of the wound can be readily imagined. The wound was closed by leaden sutures, together with a long strip of adhesive plaster. The patient reacted very slowly, and for some time a fatal termination was highly probable. Suppuration was profuse from the large wound, but under the free use of quinine, tonics, and a good diet, together with careful nursing, he finally recovered. The ligatures from the main arteries came away on the twenty-fourth day.

I see it stated in the able surgical Centennial Memoir by the

distinguished American surgeon, Dr. Samuel D. Gross, that the gluteal has been ligated twice successfully in the United States for aneurism: first, by Dr. John B. Davidge, of Baltimore, and secondly, by Dr. George McClellan, of Philadelphia. Both of these cases were successful, although much blood had been lost. Fortunately for the military surgeon, a wound of the gluteal is but seldom met with.

Clinical Reports.

Case of Cancer of Liver. J. P. WALL, M. D., Tampa, Fla.

On the 13th of May last, I saw A. P——, white, æt. 22 years, native of North Carolina. He was complaining of some pain in the right side extending into the loins. This pain, every few days, assumed a paroxysmal character of great intensity, occasioning the severest kind of suffering. For several months previous, he had been engaged in school teaching in the interior, where there was some, though no great deal of, malaria.

Previous History.—From early infancy he said that he had been troubled with some affection in the right side, with, now and then, these paroxysmal attacks of pain; and that the medical men who have been consulted—seven at one time being in consultation—had never been able to arrive at any definite conclusion as to the true nature of his malady, some thinking it some obscure disease of the liver, and others, that it was a neuralgic affection of the muscles. His general health was, as a rule, tolerably good, and his nutrition appeared in no way defective, while exercise, both on foot and horse-back, gave him no inconvenience.

On examination by palpation of the abdomen, I was unable to discover anything wrong save a marked rigidity of the abdominal muscles, particularly on the right side; in size and position, the liver appeared to be about normal. Pulse and temperature also about normal. As he had been in a malarious section, and being inclined to the opinion that the pain he complained of was neuralgic, I prescribed a purgative and quinine.

Did not see him again till the 16th, when I was sent for with the statement that he was suffering with one of his paroxysms of pain. He complained now of intense pain principally located in the back and left chest. A dose of morphine was administered hypodermically, with the effect of affording speedy relief. Saw

him again next day, and his appearance being somewhat bilious, administered a purgative.

Several days now elapsed before I was requested to see him again. In the meantime, I had learned that he was not disposed to carry out implicitly my directions, and, moreover, was indulging at will in the use of whiskey and laudanum. Saw him again about the 24th, and on inquiry, learned from himself that he had used opiates all his life, pretty freely at times, though he was not addicted to it as a regular habit. I was still inclined to the neuralgic theory of his disease, without, however, strengthening it by pressure over the spine. About this time he had got in a tub-bath, and remained so long as to bring on a chill, followed by fever, but which did not recur after taking quinine prescribed.

From this time on I saw the patient regularly and daily. I made another examination of the abdomen, and was surprised to find the liver very much enlarged, rising high in the chest, and bulging the ribs out considerably, more on the right side than on the left. No jaundice, and skin clear. A day or two afterwards he had another rigor followed by fever.

The day following this, I requested my friend, asst. surgeon, Joseph Y. Porter, U. S. A., stationed with troops here, to see the case with me. We recognized now the fact that there was some disease of the liver, but neither of us could satisfy our minds as to its character. The enlargement of the liver continued to increase rapidly, rising up to the right nipple and bulging out still more the lower ribs, which became almost stationary, and the epigastrium.

On the 1st of June there was another rigor with fever. With the rapid growth of the liver, the pain had more completely localized itself in the right side, and the paroxysms of intense agony had become so frequent that morphine had to be continuously used to relieve pain, with additional doses of chloral to procure sleep.

On the 2d of June, jaundice set in, bile appearing in the urine; and by the 3d the skin was of a deep icterode hue. With the jaundice, the stomach became irritable, so that hardly anything was retained, but was either vomited or ejected by eructation.

On the 3d, in consultation with Dr. Porter, it was determined to aspirate the liver; for, though there had been no marked fever indicative of inflammatory action, the several rigors seemed to point to suppuration. No fluctuation, however, could be detected.

On the following morning, Sunday, Dr. F. Branch visited the case with us. The patient's condition now was growing extreme; the pulse was weak; respiration embarrassed, and the hands and

feet cold. The patient had all along expressed the wish that I would open him and see if he could not be relieved in some way. I now explained to him the nature of the proposed operation, giving him to understand, however, that it was altogether of an exploratory character, and that nothing in the way of positive benefit could be promised by us. His consent was given without hesitation. The aspirating apparatus was one that I had improved, having two India rubber tubes leading from a good sized bottle with a large mouth, and using a stomach pump for exhausting, and an exploring trocar for puncturing. Near the rounded cartilages, bordering the epigastrium on the right, I thought there was some slight sense of deep fluctuation, and as at this point the bulging was most prominent, I selected it for the place of puncture. A slight cut having been made through the skin, the trocar with stylet was slowly introduced about three inches. The stylet was withdrawn and the end of the proper rubber tube slipped over the mouth of the canula. After a few strokes of the pump, thin bile began to flow into the receiving bottle. Having got into the gall bladder, I deemed it wisest to empty it so as to prevent effusion through the puncture. Between two and three ounces of bile was drawn off, when the bile ceasing to flow, the canula was withdrawn. The operation was not attended with any pain of consequence or any ill-effects.

Saw the patient again in the afternoon and found him still gradually sinking, with the illusion of one suffering with *delirium tremens*, though rational when addressed. He complained of no increase of pain in the abdomen, nor was there any tympanites. For the two last days he complained of pain in the hands and feet, and on this last afternoon these complaints were greatly increased. He expired during the night.

Autopsy.—About noon the next day we opened the body, and found the right lobe of the liver filled with carcinomatous nodules, varying in size from a marble to a small orange, which, on section, presented the characteristic whitish appearance usually described in the books. The liver weighed seven pounds and nine ounces. The lower surface of the organ in the fissure and neighborhood of the gall bladder, was affected with encephaloid, which had united in a mass the duodenum, pylorus and head of the pancreas, which allowed considerable flakes of the encephaloid mass to be rubbed off with the finger. This encephaloid union had tended to fix the central part of the liver and gall bladder so that the anterior border of the organ was near three inches lower than the gall bladder, as was proven by the line of puncture through the border before the trocar entered the gall bladder.

In conclusion, I would say that the autopsy alone determined the true character of the affection. Whether justifiable in puncturing the organ and aspirating as was practised, I leave for others to judge; but of one thing I feel satisfied, and that is, in the present case it did no harm.

An Obscure Case of Nervous Trouble, Traced to Anteflexio Uteri—Posterior Section of the Cervix—Cure. Reported by JOHN N. UPSHUR, M. D., Richmond, Va.

Miss —, æt. 35, from an adjoining State, consulted me April 21, 1876, giving the following history: She was a feeble, nervous child; began to menstruate at 14 years, but the function was never normally performed as to quantity of discharge, or time of return of the periods—in quantity being so scanty as to amount almost to amenorrhœa, and the time of return always from five to six weeks. At 17 years of age, she had chorea, which has lasted ever since, in conjunction with other distressing nervous symptoms, as stammering, convulsions, &c. When a school girl, she suffered much at times from pain and a sensation of weight in the hypogastrium, and much discomfort in walking. At such times it afforded her great relief to place her hand in her pocket and support the abdomen. About four years ago, she had distressing head and other nervous symptoms, a description of which I give in her own words:

"Among the first troubles was that the floor would not keep still, but was a succession of billows whenever I began to walk; then I carried a brick in the top of my head, that increased in size and weight, till it seemed to press all the life out of me almost; and around and across that brick was a band of iron, hot, about the width of my two fingers, drawn tighter and tighter, until it would become beyond my capacity of endurance. Or at other times, my head would be as light as eider down, and feel as if it was flying off into space. At long intervals I had a real headache, agonizing; but usually in the ordinary sense of the word, I had no pain. At times the left side of my head, face and throat would twitch violently, and my left arm, right leg from the hip down, would be so numb, I could barely move the limbs, and my tongue and throat would feel as if thousands of pins were sticking into them, and I first suffered with choking spells—am still subject to them. Invisible hands would grab me in various parts of my body; and all over me, inside and out, worms held high carnival, and disported themselves riotously,

and oh! the overpowering flashes of heat, and blinding flashes of light, brighter than any noonday sun; and the sights I saw! the double vision till I could not know which was the object, and which its double. Now and then I would be nearly blind, I could not read for months, and if I had tried, could not have remembered."

These distressing symptoms lasted until a little more than two years ago, when they culminated in violent convulsions, lasting for six weeks, almost continuously, characterized by extreme opisthotonos, the *mind* clear always, patient laughing, screaming or singing songs. She suffered much at this time from lassitude, and said she always felt much rested when the convulsions passed off. She was confined to the house eight months by this attack.

The diagnosis in her case was *spinal irritation*, and paralysis was feared by her physician and friends.

When she came under my care, I found the following symptoms present: Patient intensely nervous; involuntary twitching of the muscles of the face, neck, and upper extremities; stammers in talking at times; sleeps badly at night, not more than three hours generally; little appetite, and suffers much from acid stomach; distressing vesical irritation; bowels generally regular; some dragging sensations and weight in hypogastric region, and pain in the small of the back. She for sometime had profuse leucorrhœa, but in the last six or eight months, it has given place to a thick, ropy, tenacious, mucous discharge. Menstruation irregular, and *very* scanty, lasting four days, but amounting to not much more than a *show* the whole time; the discharge being sometimes a light pink color, and sometimes resembling coffee grounds, and very offensive to herself. She had never suffered any pain nor passed any clots, simply because the discharge had always been too scanty. Great exacerbation of the nervous symptoms at each period. Walking up stair-steps, or any distance causes her much discomfort.

Physical Signs.—By touch the womb was found displaced; neck very soft and flabby to the feel; upper portion indurated and slightly tender. Examined bi-manually, womb tender; ovaries and vaginal walls normal. Examination by speculum, showed a conical highly colored os and cervix; and by Sims' probe, decided antelexion—the smallest os I ever saw—the probe could scarcely be introduced.

Diagnosis.—Antelexion causing corporeal endometritis.

Treatment.—(Preliminary.) Two of Warner's compound phosphorous pills (phosphorus, gr. $\frac{1}{50}$ and nux vomica, gr. $\frac{1}{25}$), three times a day after meals. To use twice a day a douche of hot water, as hot as could be borne. Her period came on the 1st of

May, lasted four days; she was much more comfortable as to nervous symptoms—she had none until the third day.

May 9.—While she was under chloroform, I made a posterior section of the cervix, (as described by Thomas, p. 327, 1st ed.) except that the cotton plug placed in the divided cervix was saturated with a solution of persulphate of iron instead of glycerine, to prevent hæmorrhage, this (secondary hæmorrhage) being *the danger* of the operation. There was very little bleeding; a great deal of twitching and nervous excitement when she recovered from the chloroform. At my evening visit, she was cheerful and very comfortable.

May 10.—Was kept awake by acid stomach, but otherwise doing well. Ordered Reed & Carnrick's Lactopeptine, quinia, carb. potass. and charcoal. Diet, cold bread and butter, beef-steak, and a little sherry wine allowed; both tea and coffee disagreed with her.

May 12.—Patient sleeps better; less muscular twitching; *no vesical* trouble since the operation; removed the cotton tampon; canal of the cervix well open; to use daily a copious vaginal douche of warm water well impregnated with carbolic soap.

May 13.—Examined with the speculum; wound looking well; compound tinct. iodine (Churchill's) applied to cavity; some acid stomach complained of.

May 24.—Steady improvement; iodine has been applied every other day; was allowed to sit up on the tenth day; sleeps much better at night; all of the nervous symptoms subsiding; wound in the cervix nearly healed; no leucorrhœa or mucous discharge; complains of some soreness in the right iliac region, and of sharp pain, and taste of iodine in her throat, soon after its application; pain soon subsides; no dyspepsia; muscular twitching and staggering decidedly better. Rode several squares yesterday, without discomfort, except slight fatigue.

June 3.—Normal period beginning on 28th of May, lasting six days. Flow more copious, and period altogether more comfortable than ever before—*no nervous symptoms*. Had severe pain on the day before its advent, from the accidental injection of water into the womb, in taking the vaginal douche—this soon passed off—injection suspended.

June 8.—On vaginal examination, the wound in cervix healed; canal of cervix as patulous as could be desired. Patient discharged.

On 11th returned home, and reports that she stood two days and night's travel well. A few days before she went home, she had a sharp attack of dysentery, which weakened her very much, but it yielded promptly to remedies, though she was not so strong when she left the city as I desired.

The patient writes, that her period came on 26th June, and lasted four days, with sufficient flow, and little or no pain. Her general health, under the influence of tonics, is improving. She is now not conscious of having more sensitive nerves than other people, in short, though, there is still some (not much) local trouble. I do not claim too much when I say that she is entirely well with this exception.

Recovery under Electricity of a Case of Hemiplegia, due to Cerebro-Spinal Meningitis. By L. M. WOOD, M. D., White Church, Kansas.

I was called to see a little girl, aged six years, on April 21, 1875. When about two years old (while teething), she had a severe attack of cerebro-spinal meningitis, which resulted in right hemiplegia, especially marked in the lower extremity. Six physicians of the regular profession had attended her at different times during the three years of her paralysis, without, however, doing her any perceptible good whatever. All of the six physicians pronounced the case hopeless.

On examination when I took charge of the case, I found the right leg very much contracted; it also measured three-quarters of an inch less in circumference than the sound side; the temperature was also very much depressed. I at once put her upon the treatment recommended by Dr. John J. Caldwell, of Baltimore, in the November No., 1874, of the *Monthly*, with the exception that I used Davis & Kidder's magneto-electric machine instead of the instrument he recommends, morning and evening. Each application lasted about 30 minutes—the poles being moved about over the surface of the affected limb. Muscular electro-motor contractility was very imperfect at first—there being scarcely any effect when the poles were applied over the sacral plexus. In a short time after commencing treatment, the symptoms were all improved; and now she is almost able to walk unassisted.

Correspondence.

Sulphate of Cinchonidia.

Mr. Editor,—Last spring, Messrs. Powers & Weightman, of Philadelphia, sent me an ounce of the sulphate of cinchonidia, which I used, and I watched its effects with great care. My ob-

ject in writing this paper is to give my experience with the agent, and solicit others to follow my example.

When I received the cinchonidia, I was suffering intensely with a pain over my right eye and temple, that had been troubling me for three days. It came on each morning about sunrise, and increased in severity until 1 or 2 P. M., when it would gradually subside, and by night, I was easy. I had not taken quinine because it always produces violent pain in my bowels. On receiving the cinchonidia, I determined to give it a trial. I took grs. x on going to bed, ten grains more at 3 A. M., and another ten grains at 8 A. M. The pain was never "heard from" again, and I felt no bad effects from it—not even deafness.

The next patient to whom I administered it was a lady suffering with intermittent fever—a severe attack. She bore the use of quinia very badly; it affected her head and whole nervous system to such a degree that I could rarely ever get her to take a sufficient quantity to keep off a paroxysm; at least, the only way in which I could give the medicine to her at all was by making a pill containing quinia, gr. ij, and castile soap, gr. j. In addition, I would have to give potassium bromide, gr. x, three times a day when her stomach would bear it; but when her stomach would not tolerate the latter, I would then have to give camphor monobromide, gr. v, in pill form, three times a day to quiet the nervous symptoms. This patient took cinchonidia without trouble, and it acted like a charm.

I continued to confine my experiments to those patients that had some peculiar idiosyncrasy that precluded the use of quinia except with trouble; and in every instance the results were satisfactory. For children, it is greatly to be preferred to quinia. Their stomachs retain it better. For the past two months, I have been using it almost entirely to the exclusion of quinia, and find it to answer every indication for that drug, with the following advantages: It is not so bitter as quinia; it is more easily retained by an irritable stomach; it affects the head less; it is as soluble, and as easily made into pills; the dose is the same, and it costs only about eighty cents an ounce, instead of \$2.50 or \$3.00.

I sincerely hope this note will induce others to use this valuable addition to the *materia medica*, and to let their experience be known.

Respectfully yours,

Jamaica, Va., July 26, 1876. WM. K. GATEWOOD, M. D.

Dysentery—Its Treatment by Opium, Ipecac and Quinine.

Mr. Editor,—For the last eighteen years, from the middle of May to the middle of June, we have had an epidemic of dysentery in this section of North Carolina. During some years, the disease made its appearance earlier, and continued longer; but it has always been most prevalent during the last weeks in May, and the first two or three weeks of June. I have this summer had such an epidemic to contend with in my practice, and I have concluded to write you somewhat in relation thereto—just a few words and opinions, derived almost entirely from my own experience, with regard to the treatment.

I look upon dysentery of any variety, prevailing among children from five months to two years old, as the most formidable disease with which I have to contend; and although I can hardly say that I regard it as absolutely the only *opprobrium medicorum*, still I can say that I do not like to treat it. After having patiently and repeatedly tried every plan of treatment recommended in the text-books, and very many suggested in the medical journals, and many neither recommended nor suggested by either, I am yet forced to confess that I have found no treatment which I look upon as infallible, or that I can recommend with any great amount of confidence.

My fatal cases of dysentery have always been under eight years of age. I attribute this greater fatality in the very young in part, at least, to the fact that I have not been able to use opium so freely in such cases as among older patients; and to the fact that I cannot impress upon little children the importance of carrying out my directions with respect to diet, rest in the recumbent position, etc.

No fixed, unvarying plan of treatment can be suitable for every case of dysentery, because all cases are not seen at the same stage of the disease, and because of individual idiosyncrasies, complications, etc. But in the larger proportion of cases, as we see it among adults, or even in children above eight or ten years of age, I can confidently recommend the following plan of treatment:

If the patient be an adult, I prescribe from one and a half to

two grains of gum opium, with eight or ten grains of blue mass, to be made into pills or powders, and all taken at bed time. I order a tablespoonful of the sulphate of magnesia to be taken twelve or fifteen hours after the opium and blue pill. After the bowels have been freely moved once or twice, I give five grains of Dover's powder, and continue to give it in five- or six-grain doses every four hours, if the stools are frequent; if not, the powders may be given at longer intervals. This treatment is varied according to the age of the patient, and according to special indications which may be present, or may arise in any case. I say to every patient: the less you eat, the less you drink for a day or two, the less you strain at stool, and the longer you resist the desire to go to stool—in fact, the more perfectly quiet you are in the recumbent position, the better will be your chances for a speedy recovery.

I believe a large number of cases will get well if these directions with regard to diet, rest, &c., be faithfully carried out, without one single grain of medicine. I heard Prof. Robley Dunglison express such an opinion in 1855; my experience fully confirms it; and now I can also fully endorse the following opinion of Prof. Flint: "Sporadic dysentery, as a rule, and not infrequently epidemic dysentery, tend intrinsically to recovery. Recovery, under these circumstances, takes place, whatever be the treatment, provided it be not destructive. The success of treatment in such cases is shown by the short duration of the disease, its diminished severity," etc. The study of the natural history of dysentery shows that there is, in a very large proportion of cases, a tendency to recovery. Nevertheless, some plans of treatment have been more successful than others; and I am so well pleased with that above written that I will venture to recommend it to all who have not tried it.

I have resorted to every conceivable plan of treatment for this disease; consequently I cannot be regarded as a routinist. I like the treatment spoken of because I have resorted to it for eighteen or twenty years (modified, of course, according to circumstances), and have never lost a case of dysentery of any variety over eight years of age. I do not know how I fell upon it; but I do know that it has often been "a friend in need" to me. It is a weakness of mine to "praise the bridge that bears

me safely over." "I'll bet my bottom dollar on it" till it fails me, and as this has not failed me, I'll bet on it still; but of course I won't stake a dime.

I prefer that my patients with bloody flux shall abstain absolutely from eating and drinking for several days after treatment is begun, or, at least, as long as possible without great inconvenience. Then I allow them small quantities of concentrated beef tea, the essence or extract of beef,* and such other nutrients as can be given in small quantities, and often repeated. I may here say, too, that I think I have often seen good, ripe, soft peaches highly serviceable in the chronic dysentery of teething children. I allow wines, brandies and other preparations of alcohol in nearly every case, unless contraindicated by other complications.

In this connection, I will report a case in which my plan failed, and the ipecacuanha treatment was successful:

About eleven months since, Mr. H. consulted me; he stated that he had been suffering from dysentery for several weeks, and had taken Epsom salts, laudanum, and a variety of teas without any benefit. His was a neglected and aggravated case. I put him on the treatment above-mentioned without any good results. I then tried consecutively opium and acetate of lead; opium and subnitrate of bismuth; opium and tannic acid: opium, hyoscyamus, lupulin and camphor; mixtures containing either creasote, nitrate of silver, kino, catechu or aromatic syrup of galls, etc., without any great benefit. I even gave him fluid extract of ergot. I also administered either nitrate of silver, laudanum and starch, or creasote, laudanum and starch by enema all the while. I injected cold water into the rectum, and this last afforded very considerable comfort to the patient. At length, one night I gave him one drachm of pulv. ipecac, with eighty drops of laudanum by enema, and two grains of solid opium by the mouth. The next morning, I found him better; he had passed a more comfortable night; had decidedly less tormina and tenesmus, and but slight sickness of stomach. I now prescribed, to be taken every four hours *pro re nata*, two pills containing together opium, grs. ij; pulv. ipecac, grs. iv, and gum camphor, grs. ij; and, in addition, I ordered one drachm of ipecac, with eighty drops of laudanum, every night and morning by enema. He was allowed crackers and beef-essence, wine, brandy, etc., in

§ *Valentine's Meat Juice and Glycerine, as recommended by Dr. McIlhenny, in this number of the *Monthly*, is especially to be recommended.—EDITOR.]

suitable quantities. He continued to improve under this treatment, which was continued for upwards of three weeks, and is now in his usual health. Before he was attacked with dysentery, he weighed 212 pounds; when he was able to leave his room, he weighed 130 pounds, having lost 82 pounds or more during his illness. He bore the use of opium astonishingly well.

I am pleased with the ipecac treatment in dysentery, and have used it for several years with very happy effects, not only as administered in this case, but as recommended by Maclean, Flint, Tanner and others.

It seems to be a general impression that where quinine becomes necessary in dysentery, complicated by malaria, the dysenteric symptoms are very generally aggravated by its use. Perhaps this is so, but such is not my experience. I live in a malarious section of country, and I find that many of my flux patients will not improve until I give them quinine. But a few weeks since, I had an obstinate case in an infant six months old, and there was absolutely no improvement in the case until the child had taken ten grains of quinine in divided doses.

In truth, almost all of the diseases of this locality are modified to a very considerable extent by malarious influences, and demand quinine as an aid in effectual treatment. And I have sometimes thought that our preachers preach better sermons, our laymen pray better prayers, and our women bear healthier children, after the judicious administration of some of the preparations of bark; nevertheless, I do not believe that quinine is, *per se*, either an ecboic or an oxytocic.

Yours respectfully,

R. L. PAYNE, M. D.

Lexington, N. C., June 17th, 1876.

The Cæsarian Operation—Death of one of its Offsprings.

Mr. Editor,—Most of your readers in this city no doubt saw the following announcement, which appeared a few days ago in the *Daily Dispatch*:

“*Death of Newspaper Bob, the Cripple*.—Everybody in Richmond remembers little Bob, the crippled newspaper boy, who used to hobble around our streets and sell newspapers. The poor fellow has met with a sad fate, as the following letter

will show: 'Captain Putnam—Dear Sir: Bobby Moore, the little colored boy who went to New York last fall from your place to sing and dance, was drowned to-day at 3 o'clock while bathing at Gloucester, N. J., four miles from here. I saw him taken from the water dead. Respectfully,

DR. T. W. WEEKS.

11 North Tenth Street, Philadelphia, July 20.'"

This announcement is followed by some particulars in relation to Bob, and a kindly expression of regret at his unfortunate end.

Similar notices appeared in the other city papers; but none of them alluded to the fact which is most interesting—especially to medical men—with reference to this deformed negro dwarf, and which was probably unknown to the great majority of those who saw him daily on the streets, viz.: that Bob, like Macduff, was "not of woman *born*," but "ripped from his mother's womb"—not "untimely," however, as Macduff declares to have been the case with himself.

In other words, Bob was delivered by the *Cæsarian operation*, performed upon his mother in the year 1856, by Dr. Edward C. Drew, then of this city. By a notable coincidence, this operation was performed in Richmond twice in that year, and within a few weeks. It was first performed by Dr. Charles S. Mills upon a stunted and deformed negro woman, with success as to both mother and child—the latter surviving several weeks, and then dying from being "overlaid;" and the mother living to become pregnant again, and have the operation performed upon her a second time, years afterwards. This time, however, the result was less fortunate than before, as the woman died, apparently in consequence of an attack of dysentery; and the operation likewise failed to save the child, which was premature.

In Dr. Drew's case, which occurred shortly after Dr. Mills', and of which no complete report was ever published, the woman died a few days after the operation, of convulsions—if my information is correct—induced by eating *dumplings*. But the child survived, and grew to the age, though not to the size, of manhood; for Bob was a diminutive specimen of humanity, his height probably not exceeding two and a half feet at the time of his death; and we are informed that he was drowned in water not over that depth. Few of those who saw him every day on the street imagined that, when taken from our midst by the "Va-

riety manager," he was nearly twenty years old. He was quite stunted in growth, and his body and limbs hardly larger than those of a child seven years old. His legs were short and crooked, apparently from the effect of rickets, and so nearly useless in locomotion that he was compelled to use crutches, with which he swung his body forward rather than walked. That he "could dance a jig as well as any one," as stated in the *Dispatch*, seems scarcely credible. He moved about briskly, however, in plying his vocation as newsboy, and seemed to enjoy life, in his way, as much as those more favored of nature and fortune, who were accustomed to look with pity upon "poor Bob."

An editorial notice of Dr. Drew's operation, and of the first operation of Dr. Mills, may be found in the *Virginia Medical Journal* for August, 1856; and I am under the impression that they are both noticed in a paper by Dr. R. P. Harris, of Philadelphia, on the Cæsarian operation in the United States, which appeared in the fourth volume of the *American Journal of Obstetrics*.

Yours respectfully,

L. S. JOYNES, M. D.

Richmond, Va., July 25th, 1876.

Code of Ethics.

Mr. Editor,—In the independent stand you take in regard to the "Code of Ethics," you do not invite, but rather discourage, support;* yet I cannot refrain from giving a hearty endorsement to all you have written on the subject.

You do not go far enough, in my opinion, nor strike at the root of the matter. I am responsible for the following: I early signed, and have, I believe, conscientiously carried out the Amer-

*We were fully conscious of the unpopularity of any adverse remark about the "Code" at the time we commenced our editorial war against it. As we do not hold ourselves responsible for opinions expressed by our contributors, we did not seek to involve others in our responsibility. We have, however, been agreeably surprised in finding that our views meet with favor from many eminent in the profession. This leads us to hope for reformation at an earlier day than we had anticipated. Yet, lest our position in what we have written, and intend hereafter to write, be misconstrued, it is proper to say, in reference to Dr. Bahnsen's letter, that while we are glad to have his endorsement of our position, and while we agree with him that "educational qualification" should be an important plank in the platform of the reforming party, still, in our opinion, he makes a too sweeping charge against all other than Harvard College. The grand object that Dr. B. and we, with him, seek, is not to be attained by attacking Colleges—that is wasting ammunition—but by establishing competent boards of medical examiners, who will be rigid enough in their examinations to exclude the incompetent graduates of any and every College.—EDITOR.

ican Code, until I have passed the time in professional life when its exactions are most galling. To my mind, it appears to have been framed in the interest of imperfectly educated physicians, who had grown old in the profession, and feared lest they might be supplanted by a younger and better prepared class of men. Until the latter take the matter in hand, we will never have a "Code of Ethics" based upon the proper foundation, viz: "educational qualification." Money buys admission to the American Medical Association, as it buys diplomas by the thousand from all of our medical schools, with, as yet, but one honorable exception—Harvard. The present controllers of medical ethics in the United States are all more or less interested in these "Doctor-manufacturing concerns," and can never be induced to resign the perquisites of their dishonorable offices; while they yearly seduce thousands of dupes to invest in their worthless instructions and nefarious diplomas. Of what use can the horrible confusion of even the best ideas of theory and practice of medicine be (when they have to be condensed into the short space of eight or ten months' study) to the man who, immediately thereafter, starts out in life dependent for the future upon his own resources? I do not believe that one out of a hundred American graduates has passed what could honestly be called a successful examination; if he had, mind and body would be utterly prostrated by such concentrated intellectual strain.

But these professors, whose shameless advertisements crowd our medical journals, and whose announcements furnish us with waste paper, contend that no course of instruction can be complete—they merely attempt to furnish a preparation and inducement for future study. We all know that not one of ten so-called doctors have either inclination or time for systematic study after graduation; and it is base, and cowardly, and damnable for these "doctor makers" to shift the blame of this unavoidable result upon the shoulders of their ignorant and innocent (because deceived) victims. A just God will one day discriminate.

It is not my purpose to state the requirements of medical education. None are more fully aware of their magnitude than these so-called professors, whose consciences ought to smite them for the desolation and death their emissaries have spread abroad.

Their pockets, gorged with the price of blood, will not buy absolute, or enable them to pass successfully the great final examination for a degree.

Amongst the most shameless exhibits of medical education (so-called), one is furnished by the double-barreled engine of destruction composed of the Louisville Medical College and the Kentucky School of Medicine. The first name is used in winter—the second in spring, to enable students, it is said, to have the advantage of continuous study for eight months, besides the reputation of having attended lectures at two colleges. The faculty is the same in both concerns, and apparently the lectures are delivered in the same building. One hundred and sixty-four students appear on the list of the Kentucky School of Medicine for 1876, of whom 91 graduated. Of these, 50 claim the winter branch of the concern as preceptor; 11 had evidently not attended lectures before; *two* had not even matriculated, and only 28 claim to have received instruction in other medical schools. In the face of these figures, we are actually requested to believe in the respectability of the institution! In anticipation of unfavorable criticism, the newspaper and medical press has been subsidized to extol the attainments of the class. Our confidence in the resources of Kentucky is unbounded. She has the biggest cave, and the most pretentious medical journal in the country. We admit these things, for our eyes have seen them; but even then it is hard to believe that medical knowledge is indigenous.

Such mournful facts as the above (and, alas! I fear most other schools cannot show better) exhibit the real weakness and inefficiency of the American code of ethics. Their own guilt in really important matters of unwritten moral law, makes its supporters the more ardent sticklers for the letter of the code. God grant the day may soon come when the American profession will cease to swallow camels and strain at gnats. This wished-for event, will, however, never appear if the action proposed by "Specialist," in the August number of the *Monthly*, is countenanced. If he has a hankering in that direction, let him join the so-called better class of homœopathists. His explanation of common-sense homœopathy is a mere supposition, and his assumptions gratuitous. The regular profession has already too many who are "somewhat honest, and not wholly scampy and

hopelessly tricky," "ordinarily good physicians," "good fellows and probably good doctors;" and if "Specialist" wishes such entirely for his associates, my own opinion, based upon his letter, is, that his prompt movement in that direction will be a decided favor to the society to which he now nominally belongs.

Although I make no pretension to originality in the above views, I do claim the responsibility for expressing them.

Yours truly and fraternally,

HENRY T. BAHNSEN, M. D.

Salem, N. C., August 9, 1876.

Original Translations.

From the German and French. By WM. C. DABNEY, M. D.
Charlottesville, Va.

The Changes in the Spinal Cord and Spinal Nerves, which occur in Acute Basilar Meningitis. By Dr. Fred. Schultze, *Berlin. Klin. Wochenschrift*, 1876, Nos. 1 and 2.—Besides the appearances usually caused by disturbances of the functions of the brain, we frequently meet in the so-called basilar meningitis with a peculiar group of symptoms which are doubtless caused by simultaneous acute affection of the spinal cord. These spinal troubles may take the form of disturbances in the parts supplied by peripheral motor nerve-bundles (stiffness, rigidity, contractions of the muscles of the neck, and back, and of the muscles of the lower extremity as well as those of the arm and the abdominal muscles), or the sensitive nerves may be affected, giving rise to acute hyperæsthesia and hyperalgesia. By most authors these symptom are supposed to be due, not to any affection of the spinal cord, but to be caused by the brain trouble itself. Leyden maintains that the tubercular "spinal" and "cerebro-spinal" meningitis, the existence of which has been but little suspected heretofore, is certainly possible, and indeed highly probable. And he thinks that they are much more often connected with basilar meningitis than has been heretofore supposed.

Investigations on this subject made in recent times by Mag-nan, Lionville, and Hayem have proved that this affection of the spinal cord is quite generally present. Lionville describes a collection of round cells around the vessels within the white substance of the spinal cord which he considers tubercle. Vulpian has described a sclerosis of the spinal cord of circular form com-

ing on after a spinal meningitis. Schultze mentions three cases of basilar meningitis—some certainly tubercular, and some doubtful—in which the symptoms present during life were accurately observed and where *post mortem* examinations were obtained. It will be unnecessary to give the details of these cases. The following conclusions were reached:

(1.) The stiffness and contraction of the muscles, as well as the hyperæsthesia in the regions supplied by spinal nerves, occurring in the course of so-called basilar meningitis, whether of tubercular nature or not, do not have their origin in the brain, but are due to the meningitis also attacking the spinal membranes. Spinal meningitis is also much more commonly present in basilar meningitis than is commonly supposed.

(2.) These symptoms occur on account of the progression of the inflammatory process from the membranes by means of the vessels to the nerve-bundles; and hence partly from the inflammatory irritation of the nerve-bundles themselves, and partly on account of the irritation of the spinal cord in which "myelitic" masses are found.

Treatment of Diseases of the Nose. By Dr. George Catti, Assistant at the Laryngoscopic Clinic in Vienna, (*Allg. Wein. Med. Zeit.*, June 27, 1876).—[This paper is a very concise statement of the means at present employed by physicians who pay special attention to the subject in the treatment of certain diseases of the interior of the nose. We believe it will prove very interesting and instructive to many physicians engaged in general practice, and hence translate it for the *Monthly*.—W. C. D.]

Great advances have been made of late years in the treatment of diseases of the nose. Many diseased conditions of this organ, which were formerly considered incurable, have been brought to a favorable termination by patience and perseverance. The therapeutic procedures consist in the use of so-called cleansing appliances and the application of medicines themselves. Among the first may be mentioned the snuffing of fluids through the nose, drinking through the nose, nasal injections, and the various forms of nasal douches.

Medicines themselves, with or without previous cleansing of the nose, may be used in different ways. In treating the anterior parts of the nasal cavity, a small pencil may be used, or a tampon of charpie which has been soaked in some medicated solution or smeared with a salve. Applications may also be made through the cavity of the mouth to the posterior nares by means of a bent probang, pencil, or caustic. It is much more difficult to use direct and active treatment in affections of the upper or middle parts of the nasal cavity.

The snuffing up of water or of powders, or the blowing of powders into the nose, and the passage of fluids through it, have these objections: firstly, only a small part of the nasal cavity is reached at all by the medicine; and secondly, the affected mucous membrane remains only a very short time in contact with the remedy.

In high grades of hypertrophy of the mucous membrane, and in ulceration, Professor Schrötter has used the strong caustics as generally recommended. Professors Sigmund and Schuh had used suppositories made of cocoa-butter, which contained various medicines; but with these they had not been entirely satisfied, and had prepared suppositories and bougies of gelatine containing the medicine which they desired to use. These gelatine bougies were from eight to twelve centimetres in length, and from four to six millimetres in diameter,—soft, smooth, and staff-shaped, and thicker at one end than the other.

The bougie is seized close to the smaller end, inserted into the nose, and by a gradual, rotatory motion, it can be inserted entirely into the nose. It should be held horizontally so as to pass along the lower passages of the nose, and if rhinoscopic investigation be made, the anterior end will be seen to lie between the septum and the middle turbinated bone. When the nose is short, the length of the bougie has to be made to correspond; otherwise the end will pass through the nasal cavity and rest on the soft palate beyond, which causes a very annoying tickling sensation; and the contraction of certain muscles set up in this way draws the bougie farther and farther in, till it falls into the cavity of the mouth or throat. When the bougie has been entirely inserted in this manner, its anterior extremity may be seen in the rhinoscopic image between the anterior and middle turbinated bones. If, however, it has been inserted in a vertical direction, the end will not be seen at all in the rhinoscopic image, and it is doubled up in the nasal cavity.

As the introduction of a foreign body into the nose generally provokes a flow of mucus, which dissolves the gelatine, it is necessary to plug the anterior nasal aperture to prevent the escape of the suppository. In from one to four hours it softens down at any rate, and running back through the posterior nares, is removed by expectorating or swallowing it. The use of these gelatine bougies possess some decided advantages: firstly, they are easily put in place by the patient; secondly, the medicine can in this way be kept for a longer time in contact with the diseased mucous membrane; and thirdly, some mechanical pressure is thus exercised on the mucous membrane.

The insertion of these nasal suppositories is very simple and

easy, and any patient can do it for himself; they should be used every day or every second day in one or both nostrils. Dr. Catti states that he has kept up this treatment as long as two months. The most brilliant results are obtained in chronic catarrh of the nose. Patients who for a long time have tried various means without success, have been entirely relieved of their trouble in a comparatively short time by the use of these bougies.

Dr. C. has as yet only used copper, sulphate of zinc, and extract of rhatomy in this way. He thinks this method is especially servicable in the chronic catarrh from which many persons suffer in winter; and also in cases occurring in the persons of singers, actors, or lecturers. In such cases, if the nose be examined from the front, nothing will be seen except reddening, with perhaps slight swelling of the mucous membrane. On rhinoscopic examination there is observed swelling of the mucous membrane on one or both sides of the septum, combined very frequently with considerable swelling of one or the other of the turbinated bones. The impermeability of the nasal passages to air cannot be accounted for however in this way. The seat of the trouble is in the upper and middle parts of the nose. Again the gelatine bougies have been used with considerable benefit in cases of chronic catarrh caused by an enlarged tonsil. A high grade of hypertrophy of the tonsil, such as is sufficient to close the funnel-shaped passage from the nose to the pharynx (choanæ) is very rare. In the course of three years, in the large amount of material furnished by Schrötter's clinic, Dr. C. has only seen this amount of hypertrophy twice. As a general rule, the enlarged tonsil does not extend beyond the level of the septum; but occasionally the upper-third or half of the funnel-shaped passage will be closed by it. The defective hearing so often observed in these cases is due to chronic catarrh of the Eustachian tube. Treatment of the nasal trouble and the application of tincture of iodine to the affected tonsil will often produce a cure, or at any rate, cause a very great improvement in the hearing. The mode of treatment by cauterization with caustic potash, the galvano-caustic, and extirpation of the affected tonsil is well known, but in many cases in young and sensitive persons these operations are entirely impracticable, and we must then be satisfied with the treatment previously described.

Scrofulous ozæna should be treated by first removing all secretion, and thoroughly cleansing the nose, and then inserting a gelatine bougie medicated with sulphate of zinc or rhatany. Finally this method of treatment has been used in that form of ozæna caused by ulceration and necrotic processes in the nasal cavity. It is often found that even after removing the sequen-

trum, and thoroughly cleansing the nose, the ozæna still continues. The secretion mixed with ichor and mucus dries into hard masses in the shape of hard, thick plates which can only be removed by the forceps. Gelatine bougies containing carbolic acid have been repeatedly employed in these cases with the most satisfactory results.

[It is highly probable that such gelatine bougies medicated with ergotine or Squibb's solid extract of ergot would be exceedingly serviceable in those cases where the mucous membrane of the nose was much congested, such, for example, as the autumnal catarrh from which many persons suffer so much.

Frey states that the mucous membrane of the nose in many places consists of a mass of tortuous vessels, and Dr. Bigelow of Boston claims to have found a genuine erectile tissue in the nose. The action of ergot in causing contraction of unstripped muscular fibre (which is found in both blood vessels and erectile tissue), is universally acknowledged; and hence it would seem applicable in the class of cases mentioned above. It may be well to mention in this connection a powder recently proposed by Dr. David Ferrier, consisting of subnitrate of bismuth and pulverized acacia with a very small quantity of morphia, which he claims will almost invariably cure a common "cold in the head" in a few hours. The powder is to be used as a snuff.—W. C. D.]

Influence of Hepatic Alterations on the Formation and Elimination of Uric Acid.—By Charcot (*Le Progrès Médical*, June 10th, 1876).—In the last number of the *Monthly* was an article by Charcot on the amount of urea excreted in certain diseases of the liver. We translated this, feeling sure it would prove of general interest; and for the same reason we propose to translate now an article by the same author on the "*Influence of Hepatic Alterations on the Formation and Elimination of Uric Acid.*"—W. C. D.]

M. Charcot commences by calling attention to the fact that uric acid is a normal constituent of healthy urine being present to the amount of $\frac{1}{2}$ gramme. He further alludes to the fact that it belongs to the same class of bodies as urea, but is less oxidized and less soluble than the latter substance. Under certain circumstances uric acid is formed, however, in very much larger quantity than in health, and it then plays a very important part in certain pathological conditions. In gout, for example, uric acid in the form of urate of soda accumulates in the blood and figures as an essential element in all pathological productions which occur in this disease.

Let us consider now the question what connection exists between accumulation of uric acid in the blood and disturb-

ances of the function of the liver. Attention is next called to the fact that uric acid (as well as nearly all other products of nitrogenized disassimilation) is formed in the liver. The occurrence of deposits of urate of soda in the joints, &c., in gout, is universally known, and need not detain us. It remains to be seen what part the liver plays in this affection. The morbid changes occurring in this viscus in gout have, unfortunately, not been accurately observed; but we have an abundance of evidence showing that its function is materially altered. Nearly all authors who have written on the subject of gout have described as a premonitory symptom a tumefaction of the liver, which is revealed by percussion and palpation. Scudamore mentions a case in which the liver was enlarged, and the patient suffered from dyspeptic troubles for three months before the gout made its appearance, and both this writer and M. Galtier Bossiere have frequently observed a permanent tumefaction of the liver in persons suffering from chronic gout.

There is, however, another symptom which occurs simultaneously with the hepatic enlargement which has been already described as premonitory of gout. This is a very decided increase of the amount of uric acid in the blood. It is only in cases of inveterate and chronic gout that uricæmia is constantly present. In the common form, it is only observed when the attack is coming and during its continuance. It is hardly possible that the relation between the two symptoms which we have described can be other than that of cause and effect; and in all probability the increase in the amount of uric acid in the blood is caused by the functional disturbance of the liver. The increase in the amount of uric acid takes place at the expense of the urea, so that the two are present in the blood in an inverse proportion. There is another condition common in gout which is especially favorable for the accumulation of uric acid, namely: a functional disturbance of the kidneys which causes a diminution in the amount discharged by these organs.

Garrod has pointed out that uricæmia is almost always present in persons suffering from lead colic. This, he attributed to a functional disturbance of the kidney caused by the lead. [May it not be that the lead prevents oxidation to some extent, and thus the nitrogenized waste matter never reaches the stage of urea, but stops as uric acid?—W. C. D.]

There can be no doubt whatever that there is a close connection between gout and affections of the liver. Two cases have been reported by Hanot, one of cirrhotic hypertrophy, the other of chronic icterus, the nature of which was not known, in which

there were gouty deposits in the fingers and concretions of urate of soda in the external ear, which are unequivocal signs of gout.

The presence of uric acid deposits in the urine is generally considered evidence that this substance is in abnormal quantity; but this may not be the case, and it may be in normal proportion to the other salts, but the water may not be sufficient in quantity to dissolve it.

In some cases little calculi of uric acid are passed from the urethra already formed. This is especially apt to occur in cirrhosis and in "torpor of the liver," and it is very properly considered a fore-runner of gout. To determine whether uric acid is present in abnormal quantity, the whole amount of urine passed in twenty-four hours should be examined, and inasmuch as the amount frequently varies from day to day, the examinations should be repeated for five or six consecutive days.

Proceedings of Societies.

MOBILE MEDICAL SOCIETY.

(Reported by W. D. Bizzell, M. D.)

Tubercular Meningitis.—Dr. Fournier related the case of a young man about 17 years of age, whom he saw for the first time about three weeks since. He was suffering with symptoms of mental aberration, his chief symptom being an inordinate loquacity; he talked maudlingly and almost continuously on a great variety of subjects without pursuing a continuous train of thought. He was not insensible, and when spoken to answered quite rationally, but immediately relapsed into a condition of continuous talking. The Doctor gave chloral and bromide of potassium to secure sleep, which had the desired effect when given in large doses. The patient had exhibited these symptoms of mental perturbation for about three days before the Doctor saw him. About the close of his first week of illness, in addition to the other symptoms, there was developed a great obstinacy, making his management a work of greater difficulty; but he still answered rationally. During the second week, he seemed to grow worse; bowels constipated, and some febrile reaction. Temperature 101° to $101\frac{1}{2}^{\circ}$ F.; pulse 120 to 140, with exacerbations in the evening. About this time he began to show signs of depression, accompanied with paralysis. Dr. F. now requested Dr. F. A. Ross to see the patient in consultation. For several hours previous to the time this gentleman saw him, the usual doses of anodynes were omitted, so that he might be entirely free from under the influence of drugs while the Doctor saw him. He at this time had fever; pulse, 120; temperature, 102° F. There was some

retraction of the head, and for the first time he exhibited violent symptoms, and was impatient of restraint. Pupils of both eyes at this time were normal, though he was totally unconscious. By the end of the second week, he was considerably emaciated, head retracted, pupils dilated, and is still unconscious. At the close of the third week, better; pulse, 70; temperature, 98°; rational.

Dr. Fournier remarked that the family history in this case was tubercular; one child died from acute and one of chronic hydrocephalus. One is now suffering from tubercles of the peritoneum. Dr. F. thinks the case detailed above is suffering from tubercular meningitis; consequently, his prognosis had been grave; that he had warned the friends against being deceived by the present apparent improvement. He thinks the symptoms in this case can be accounted for on the supposition that the meninges of the superior portion of the brain was first affected, causing the mental aberration, and that, secondarily, the region of the base of the brain became involved, giving the symptoms of ordinary cerebro-spinal meningitis.

Supernumerary Fingers.—Dr. W. H. Ross reported the case of a negro girl who had six fingers on each hand. The father and mother both had suffered from the same deformity. The supernumerary fingers were removed by Dr. Scales quite readily—being merely attached to the hand, as is usually the case, by a ligament; otherwise, the fingers were almost perfect as regards external appearance, possessing two phalanges, with finger nail, etc.

Tape Worm.—Dr. F. A. Ross presented a specimen of tape worm, which had been passed by one of his patients—a middle-aged gentleman. The Doctor, convinced of the presence of the worm in the intestinal tract, had recourse to a prescription, the formula of which came into his possession some years since. The medical gentleman who used it and wrote the formula, gave it his highest commendation, claiming that it would bring away the entire worm in less than six hours. Dr. Ross had only had the opportunity of testing the remedy in one case prior to the one now under consideration. In the first case (a negro woman), the entire worm was expelled in a little more than six hours; in the case of the gentleman furnishing the specimen here presented, less than six hours was required. The formula for the prescription is as follows:

R. Pomegranite root..... 3ss.
 Pumpkin seed..... 3ss.
 Ext. male fern..... 3j.
 Powd. ergot..... 3j.
 Powd. gum acacia..... 3ij.
 Croton oil gtt. ij.

The pomegranite root and pumpkin seed are to be thoroughly bruised, and, with the ergot, to be boiled for fifteen minutes in 8 oz. of water, and strain—the croton oil to be rubbed up with the acacia and extract filix mas and formed into an emulsion with the decoction.

S. To be taken in one dose after fasting.

Restoration of Milk-Supply.—Dr. Bizzell reported a case of stoppage in the flow of milk in one breast, on account of a cicatricial deformity of the nipple preventing the outflow. He concluded to try the effect of adhesive strips, which were applied in such a way that they supported the organ, and at the same time exerted a firm pressure upon the organ. The pain and uneasiness, which had been considerable, ceased immediately, and did not return. The engorgement of the breast so much abated that in thirty-six hours the straps were quite loose; they were then removed and fresh ones applied, which were suffered to remain on for four or five days. On removing the straps, the breast was soft and flaccid; no more milk was poured out, nor any further trouble experienced—the other breast furnishing milk in abundance.

April 22d, 1876.—**An Abnormally Long Umbilical Cord.**—Dr. C. C. Sherrard was called to see a young woman in her first labor; footling presentation. As the feet came down, he noticed a prolapse of the cord between the child's knees. After trying in vain to reduce it, the Doctor informed the friends that the child would, in all probability, be still-born, which, however, was not the case, as it was born alive, and that, too, notwithstanding the fact that the cord was wrapped no less than five times round its neck. This happy result was no doubt due, as the Doctor thinks, to the extraordinary length of the cord—42½ inches by actual measurement.

Dr. T. A. Ross reported a case of **Metrorrhagia** of a most profuse character, in a young lady, 18 years of age. The patient, after a long walk, came home quite exhausted. That night she noticed a slight flow of blood from the vagina. She supposed it was the menstrual flow, as it exactly resembled it, though she had always been quite regular, and had passed through her period quite normally only two weeks previously. The hæmorrhage continued all night. During the next morning, she felt too unwell to leave her bed and room. Hæmorrhage continued throughout the day, and in the evening the Doctor was sent for. Gave a combination of lead and opium, which was kept up through the night, but seemed to do no good whatever. Then put her on half teaspoonful doses of fluid extract of ergot, and continued this throughout the day without any perceptible effect. He then substituted ergotine in half-grain doses, which was given at regular intervals through the succeeding night. Next morning she was no better—hæmorrhage still continuing. The case was now beginning to wear a grave aspect, and to stop this loss of blood was now getting to be quite a serious consideration. The patient was already blanched, and there seemed no other alternative but to plug the vagina. This was effected after considerable difficulty—the vagina being filled with pledgets saturated with the persulphate of iron. This, however, only gave relief for an hour or two. The Doctor then determined to plug the mouth of the womb itself. After introducing the smallest sized vaginal speculum, which was a matter of no small difficulty, on account of

the narrowness of the vagina and the energetic contraction of the sphincter, he tightly plugged the mouth of the womb, using a pledget of cotton saturated with the persulphate of iron; the vagina was then tightly plugged in such a way as thoroughly to support the uterine plug. The hæmorrhage ceased immediately, and did not return. The Doctor is of the opinion that without this timely relief, she would certainly have died from the effect of the hæmorrhage, and that nothing short of plugging the mouth of the womb itself would have sufficed.

May 6th, 1876.—**Labor Complicated with Hernia.**—Dr. Owen was called to see a woman on Sunday night, who had been in labor since the Friday before. Found the process was complicated by a hernia through the inguinal canal of the right side. The protruded mass, though not very tense, was about the size of the foetal head, and resisted all his efforts at reduction. Gave 20 grains of chloral every two hours, which, however, produced no effect on the hernial protrusion, or advancement of the labor. Dr. Heustis was called in consultation, who, also, failing to effect reduction, applied the forceps, and delivered without special difficulty. After the child was born, the hernial protrusion was very readily reduced. The child, though born alive, died in about ten hours, probably from cerebral hæmorrhage. 1

Book Notices, &c.

A Practical Treatise on Diseases of the Eye. By ROBERT BRUDENELL-CARTER, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital, etc. With 125 Illustrations. Edited, with Additions and Test types [as approved by the Author], by JOHN GREEN, M. D. Philadelphia: Henry C. Lea, 1876. Pp. 506. (For sale by West, Johnston & Co., Richmond.)

Notes on the Progress of Ophthalmology. By SAML. THEOBALD, M. D., Surgeon to the Baltimore Charity Eye and Ear Dispensary. (Reprinted from *Trans. Med. & Chirurg. Faculty of Maryland*, 1876.)

We have been delighted and instructed by perusal of Mr. Carter's excellent work. But, as we make no pretensions to having special ophthalmological information, we cheerfully adopt the "*Notes*" made of the work by a recognized authority, Dr. Saml. Theobald, of Baltimore:

"The book is written in Mr. Carter's very fluent and attractive style; and the reader is constantly impressed with the fact that the author has given close attention to, and has thoroughly mastered, each subject of which he treats.

"In treating of the ophthalmoscope, he directs attention to several points, the significance of which has not been as universally recognized as one would suppose should be the case. I refer to his remarks upon the disadvantage of having an unduly large ophthalmoscopic mirror, and the very great disadvantage of having the eye-hole of the mirror of unnecessary size.

"Considering the national prejudice upon the subject, it is worthy of remark that the author, as he tells us, has almost entirely discarded chloroform, in favor of ether, as an anæsthetic. His first trials with ether were far from satisfactory, and led him to lay it aside after a few unsuccessful attempts to administer it. Subsequently, he learned from Dr. B. Joy Jeffries, of Boston, that his want of success was due to the manner in which he administered it—to his not having given it with sufficient freedom and in a sufficiently concentrated state.

"In considering the subject of diseases of the lachrymal apparatus, he speaks in a very discouraging way of his want of success in relieving strictures of the nasal duct, and the inflammatory conditions dependent upon them, by means of the modern method of slitting the canaliculus and probing. I am at a loss to account for such unsatisfactory results as he describes, except upon the supposition that he has failed to recognize the importance of using much larger probes than were originally recommended by Bowman; for this, I am persuaded, is the secret of success in treating this troublesome malady.

"My success since" [I have substituted several larger sizes of pure silver, so that they might be bent into any desired form] "has been such as to fully justify the confidence with which I now undertake the radical cure of even long-standing cases of this affection; provided, only, the patient can be kept under observation for a sufficient interval of time, in order that, by the occasional introduction of the probe, the tendency which at first exists in most, but not in all cases, to re-contraction, may be overcome. This tendency, I may add, I have found to be favorably modified by the use of a solution of alum (grs. i-iiij to 3j) as a collirium.

"Mr. Carter's description of a class of affections of the eye which he calls *neurotic*, and which, as having their origin 'in some derangement of nervous function, possibly central, possibly occurring at a point intermediate between the centre and the periphery,' he contrasts with those of local and with those of constitutional origin; and which he further describes as being 'essentially neuropathic in their character, differing from neuralgia chiefly in this respect, that abnormal tissue change, instead of abnormal sensation, is the manner in which the malady

declares itself, I regard as an eminently important step towards scientific exactness in diagnosis, and one which will be followed by a corresponding gain in ophthalmic therapeutics. My own experience had, some time since, led me to very similar conclusions.

“Mr. Carter mentions the benefit which he had obtained in these cases from the administration of quinine, iron, arsenic, bromide and iodide of potassium and morphia. Besides quinine, opium and iodide of potassium, I would especially mention the elixir of the phosphates of iron, quinine and strychnia, as a remedy from which I have obtained most excellent results. I have employed the elixir prepared by Messrs. Sharp & Dohme, of this city, which I have found uniformly reliable. Two fluid drachms of this preparation contain one grain each of the phosphates of iron and quinine and $\frac{1}{32}$ d of a grain of the phosphate of strychnia; also, where the malady was of a subacute or chronic form, of the very great benefit which I have seen follow the introduction of a seton in the temple. It has also occurred to me that electricity, in the form of the constant current, might be resorted to in these cases with advantage.

“In advising the division of the tendons of both internal recti muscles in operations for the correction of even the slightest degrees of convergent squint, the author makes a new departure from the hitherto generally accepted rule; his grounds for doing so being that thereby the inequality of power between these muscles, which follows the division of the tendon of but one of them, and which is accompanied by a marked difference in the converging power of the two eyes, is avoided. Under such circumstances, the effect of the double tenotomy should be limited by dividing the *tendons* only, being careful not to disturb the adjoining connective tissue; and, if necessary, by the insertion of a horizontal suture. The second eye should not be operated upon until the effect of the first operation is known.

“In his chapter upon *The Uses and Selection of Spectacles*, which is devoted to the consideration of the nature and treatment of the various anomalies of refraction and accommodation, Mr. Carter brings out very prominently a point, the significance of which has not been heretofore generally recognized, viz.: the very important part which the disturbance of the normal parallelism between accommodation and convergence, necessarily present in every form of ametropia, plays in the production of asthenopia. In the accommodative asthenopia of hypermetropia, where the ciliary muscles are compelled to work in excess of the internal recti, the significance of this point has, perhaps, been fully recognized; in the muscular asthenopia of myopia, where

the disproportion is reversed, the internal recti being forced to work in excess of the ciliary, it certainly has not been; and hence we find Donders, Giraud, Toulon and others teaching the frequent association with myopia of true insufficiency of the internal recti muscles.

"I contributed an article to the *American Journal of Medical Sciences* (Jan., 1874, p. 65), the object of which was to show that the muscular asthenopia which so frequently annoys the myope is due to disturbance of the normal parallelism between accommodation and convergence, to the fact that the internal recti muscles are forced to work in excess of the ciliary, and not to true insufficiency of the former muscles, as had previously been taught. The tests which had been employed to demonstrate the existence of this latter condition, were shown to be unreliable; and I further pointed out how the indication for the relief of the asthenopia, which was the approximate restoration of the normal parallelism between accommodation and convergence might be attained. In what Mr. Carter has said upon this subject, I am disposed to find a confirmation of the views which were then advanced.

"A suggestion made by Mr. Carter deserves mention; to me at least it had the merit of novelty. Instead of employing several leeches, when more blood is required than one would be likely to draw [as in acute inflammatory affections of the iris, etc.], he recommends that a single leech should be applied, and that when the creature is nearly full, a free longitudinal incision should be made with a sharp lancet into its side near the caudal extremity. 'It will then,' he says, 'continue sucking until it is detached, being no longer inconvenienced by the distension of its alimentary canal and integument.'

"Mr. Carter's book contains many other points worthy of special notice, but more of the limited space to which I am entitled has already been devoted to its consideration than was at first intended, and I can only add that the general practitioner, as well as the specialist, will find its pages full of much that is both interesting and instructive, and which will well repay perusal."

Memoires sur la Galvanocaustique Thermique. Par le DOCTEUR A. AMUSSAT, FILS. Avec 44 Figures, etc. Paris: Libraire de Germer Bailliere. 1876. 8vo; pp. 125.

Notes on the Galvanic Caution. By DR. A. AMUSSAT, etc. (From the Publisher).

This work, by a son of the surgeon of the same name who was so eminent in the French metropolis thirty years ago, is on a subject

of great scientific and practical interest to the surgeon who aims to master all the resources of his art, and affords ample evidence that the author inherits in a large degree his father's professional talent and skill.

The first portion is devoted to a historical notice of the subject, commencing with the discovery of the calorific powers of electricity, and the announcement by Fourcroy (in 1800) of the possibility of burning iron wire by the intense heat developed by a galvanic current. Investigation of the subject led to the discovery that the heat developed in different metallic wires by currents of equal intensity, varied in the inverse ratio of their conducting power. Thus, a current which would heat a copper or silver wire but slightly, would render a platinum wire red hot. Hence the preference since given to the latter metal as an agent for the application of electric heat for purposes of cauterization.

It appears that as long ago as 1821, Recamier and Pravaz, in France, conceived the idea of making such application, and actually attempted to destroy cancer of the uterus by this new method. But the subject was then forgotten for more than twenty years, when the experiment was successfully tried, in Germany, of cauterizing the pulp of carious teeth with a platinum wire raised to a white heat by the galvanic current. In 1846, Crusell, a Russian surgeon, formally introduced this method of cauterization into surgical practice, by dividing with the heated wire a stricture of the meatus urinaris, and removing with it a fungus hematodes covering and concealing the eye. A few years later, successful trials of the new method were made by Sedillot, in Paris, and John Marshall, in London, of whom the latter especially tested its utility in quite an extensive range of cases, having employed it for the removal of hæmorrhoidal tumors, vascular tumors of the urethra and nævi, for the obliteration of sinuses, of anal, urinary and vesico-vaginal fistulæ, etc. Other testimony, not less favorable, soon followed, from various quarters; and in 1854, Middeldorpf, of Breslau, published a treatise on the galvano-cautery, in which he set forth the advantages and described the modes of employing the new agent, which, as he said, "unites the advantages of the knife, the ligature, and the hæmostatic method; which acts with safety and rapidity in regions inaccessible to cutting instruments." After the publication of this treatise, remarks our author, the galvanic cautery may be said to have fairly taken its position in modern surgery.

In the next division of his work, M. Amussat, after some remarks on the condition of the tissues after division by the incandescent wire, and on the rules and precautions to be observed in the employment of the "galvanic loop," as he styles it, in order to secure the best results, proceeds to give the detailed history of a considerable number of cases treated by this method of cauterization. We note the following: Sinuses resulting from deep mammary abscess, cured by the galvano-cautery and compression, after the failure of incisions, setons, cauterization with nitric acid, etc. A cystic tumor

of the neck cured by cauterizing the interior of the cyst (after evacuation). Two cases of large, glandular tumors in the axilla almost entirely removed by traversing them with a platinum wire, heating it to redness, and leaving it for some time as a seton. Two cases of congenital phimosis. Five cases of fistula in ano, and one of vulvo-vaginal fistula, all successfully treated by dividing the tissues with the incandescent wire—the section in all the cases being unattended by bleeding. One case of polypus uteri, one of stricture of the rectum, and one of fibrous stricture of the urethra situated near the meatus. A highly interesting case of *tracheotomy* performed for the removal of a foreign body—the division of the tissues having been effected without the loss of a drop of blood, and the few drops from the orifices made by the curved needle with which the wire was passed, having been arrested the moment the wire was heated to redness by the battery. Two cases of lipoma. One of tubercular testicle (removed).

The author also speaks of having employed the heated wire for the opening of a large abscess of the iliac fossa, and for the operation of *lithotomy*, both supra-pubic and peritoneal; but does not give the details of these operations.

Next follows a number of cases of pediculated tumors of various kinds. The concluding portion of the work is devoted to the subject of cancer of the uterus, and contains the particulars of 12 operations—10 of them being amputations of the cervix. We regret that our limited space does not allow us to give any of the details of these cases.

The author, in operations requiring the division of tissues, sometimes (though not often, it appears,) makes use of the “galvanic bistoury”—a knife made of platinum, which is heated to redness by the galvanic current while the operation is being performed.

The foregoing hurried notice may afford some idea of the interest which Dr. Amussat's work possesses for the practical surgeon. But we confess we should have been better pleased with it if it had made some reference to what has been done and written in this line on our side of the Atlantic, especially by Dr. John Byrne, of Brooklyn, whose experience with the galvanic cautery in uterine surgery seems to have been much larger than that of Dr. Amussat, inasmuch as he reported in 1873, in the *American Journal of Obstetrics*, over 40 amputations of the cervix uteri, besides sundry other operations. Of all this the author of the work before us is evidently entirely ignorant. We trust, however, that such of our readers as may desire to inform themselves on this subject will not fail to consult the valuable articles of Dr. Byrne, and that they will also acquaint themselves with the merits of a new battery for galvano-caustic surgery, proposed by Dr. B. F. Dawson, of New York, of which a description may be found in the *Richmond and Louisville Medical Journal* for July, 1876.

L. S. J.

Des Sondes à Demeure, et du Conducteur en Baliene. Par le Docteur A. AMUSSATT, Paris, France.

This little *brochure* of 15 pages treats of the use of the catheter in stricture and retention of urine, and of the filiform whalebone conductor as a guide in the introduction and change of catheters. It contains many details both interesting and suggestive to the practical surgeon, but (we believe) nothing new in principle. The ingenious instrumental devices employed and described by the author, are illustrated by a number of excellent wood-cuts.

L. S. J.

Theory and Practice of Medicine. By FREDERICK T. ROBERTS, M. D., B. Sc., M. R. C. P., Fel. Univ. College; Assistant Physician and Teacher Clinical Medicine University College Hospital; Assistant Physician Brompton Hospital for Consumption and Diseases of Chest; formerly Physician Liverpool Northern Hospital, etc. Second American from last London Edition. Revised and Enlarged. Philadelphia: Lindsay & Blakiston, 1876. Pp. 930-xv. Price, cloth, \$5; leather, \$6. (For sale by Woodhouse & Parham, Richmond.)

We have not had the time since the receipt of this volume to make a rigid examination of its contents. But our acquaintance with the merits of the former edition makes us feel perfectly safe in saying that this is the best *text-book* on practice of medicine recently published; and now that the season is at hand when selections must be made by students and others as to which texts to purchase, we wish to direct special attention to this. The great variety of subjects discussed with remarkable conciseness and clearness of style, the systematic arrangement of subjects brought to the attention of the reader, the ample experience of the author, and the thoroughly practical character of the recommendations—all concur to make this the best work with which we are acquainted for the use of college students, and even more especially for those who are preparing for examinations for positions in the Army, Navy, etc. Its numerous chapters on differential diagnosis are of special importance to clinicians. The present edition has a new chapter on the *Diagnosis of Acute Specific Diseases*. The diagnostic table of the principal fevers, covering four pages, is especially valuable in this newly added chapter. The chapter on *Diseases of the Skin* has also been almost entirely re-written, and enlarged by Mr. J. Tweedy, so as to bring the work fully up to the times.

Of course, the work has some defects; we have never seen a volume short of the inspired one that is not faulty in some particular. But Dr Roberts' treatise is as free of any important defects as any with which we are acquainted. Among omissions, however, that we regret in the present edition, we note no reference to the use of salicylic acid or salicin in acute rheumatism; nor is any mention made of the treatment of rheumatism by insulation. In the chapter on

eczema and some other skin diseases, while the use of both alkalies and tar is separately recommended, still we find no allusion to the more useful combination of tar and alkalies of *liquor picis alkalinas* (of Dr. Bulkley). A few other omissions of the same kind might be mentioned; but we refer to these chiefly that the student who adopts this work as his text-book may make marginal notes of such omissions whenever they may be detected.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M. D., F. R. C. P., Professor of Obstetric Medicine in King's College; Physician for the Diseases of Women and Children to King's College Hospital; Examiner in Midwifery to the University of London, etc. With Two Plates, and 166 Illustrations on Wood. Philadelphia: Henry C. Lea, 1876. Pp. 575, octavo. (For sale by West, Johnston & Co.)

A Manual of Midwifery. By ALFRED MEADOWS, M. D., Lond., F. R. C. P., Fellow of King's College, London; Physician Accoucheur to St. Mary's Hospital, and Lecturer on Midwifery and Diseases of Women and Children at St. Mary's Hospital Medical School, etc. Second American, from Third London Edition, Revised and Enlarged, with 145 Illustrations. Philadelphia: Lindsay & Blakiston, 1876. Pp. 490-xxiv, octavo. Price \$3.25. (For sale by Woodhouse & Parham, Richmond.)

Here are two works on Obstetrics—reprints from the London editions issued about April, 1876. Both of them claim to be practical in their teachings, and are issued with a view to be adapted as texts. With the second of the works named, the profession of America has already become more or less acquainted through the first edition. The other book is altogether new, although the name of Dr. Playfair has become familiar to every American obstetrician through his numerous contributions to societies and journals.

In looking over the introductory chapters of each author, we find that some movement takes place between the several pelvic articulations during labor. The constantly increasing number of cases reported in the journals by competent physicians no longer leaves any question as to the fact.

Regarding the interesting subject of maternal impressions, we find that Dr. Playfair is silent; but Dr. Meadows, while accepting as fact that there is often a remarkable coincidence between impressions upon the mind of the mother and the occurrence of deformities in or marks upon the child, yet is unwilling to acknowledge the relation of cause and effect, simply because "all attempts to discover any *nervous connection between the fetus and mother* have hitherto failed." This objection of Dr. Meadows has recently been so ably met by Dr. L. S. Joynes, of this city, that it is only necessary to refer to the views of the latter as expressive of our own.

A very great advantage of Dr. Playfair's work over Dr. Meadows' consists in the fact that, while the latter is sufficiently full in

the description of the signs and symptoms of pregnancy, in which chapter the author even speaks of the dangers of some of the symptoms when exaggerated, he yet gives no directions for their management. Dr. Playfair, on the other hand, devotes a special chapter to their consideration, and his directions are, in the main, well supported. Unlike Graily Hewitt, however, he does not attribute the nervous phenomena to uterine flexion, but to stretching of the uterine fibres by the growing ovum. But our space does not allow us to enter into the details of treatment recommended for the relief of the disorders incident to pregnancy.

Among the recently asserted diagnostic signs of pregnancy, both of our authors lay important stress upon the recommendation of Dr. Braxton Hicks. It is briefly stated by Dr. Meadows as follows: "If the hand is placed over the uterus, and a little firm pressure is made, it will frequently be observed that the tumor becomes alternately lax and firm; this is due to slight contraction on the part of the uterus, and it is so peculiar and distinctive that I know of no other condition that is at all capable of yielding such a result."

But we have not the space to go thus in detail. We must content ourselves with a summary opinion. It is this: While both books are undoubtedly serviceable to every professor and special student of obstetrics—the one containing a record of important facts not mentioned by the other—our preference as a text-book is undoubtedly in favor of Dr. Playfair's work. It is a handy book for reference—its theoretical statements being sufficiently full and suggestive, while at the same time it is concise and very practical. It is an excellent work, either for the student or general practitioner.

A Practical Treatise on Materia Medica and Therapeutics. By ROBERTS BARTHOLOW, M. A., M. D., Professor of Theory and Practice of Medicine, and of Clinical Medicine; and formerly Professor of Materia Medica and Therapeutics in Medical College of Ohio, etc., etc. New York: D. Appleton & Co., 1870. 8 vo. Pp. 537–xi. (For sale by Woodhouse & Parham, Richmond.)

A well-founded belief on the part of the author that he has "earned the right to address the medical profession" by having contributed "some original knowledge to the subject of therapeutics" is the chief reason stated in explanation of his present writing. We may add, there are few in the profession anywhere whose contributions to therapeutical subjects will be more eagerly sought. The boldness of some of Dr. B's original investigations, the reputation which he has gained as the author of a number of prize essays on therapeutics, the acuteness of his observations, have all conspired to make the author a popular medical writer.

Dr. Bartholow has evidently sought, in the volume before us, to present a concise, practical work—good for the student as a text-book, and useful to the practitioner—and he has succeeded admirably. He avoids, on the one hand, the unnecessary detail of the

so-called "physiological action" of remedies, which renders the reading of the work of Dr. H. C. Wood laborious; on the other hand, he avoids the minutiae of Dr. Stillé's excellent volumes.

Dr. B., in his quotations of authorities, makes remarkably few references to American writers. He seems, indeed, to know of only two or three Southern contributors to therapeutic knowledge. This singular omission of reference to American authors is peculiar, since the author was for a long while the editor of a leading Cincinnati medical journal, and as such he must have had the advantage of a long list of valuable American as well as foreign exchanges. This want of study of American authors shows itself in many places by omission of reference to uses of certain drugs which are common in this country, and records of which are sufficiently frequent. But in a work of even the size of this, there must be some omissions, and why should they not be in regard to American writings, as they are accessible to most of those who will become readers of the present volume.

In regard to the theory of his book, Dr. B. says: "Although convinced that the most certain requisitions to therapeutical knowledge must come through the physiological method," he is nevertheless "equally clear that well-established empirical facts should not be omitted."

We are compelled by the overcrowded condition of our columns to omit the few sentences we had written in regard to some individual chapters or sections. We must content ourselves with the remark that, while there are points for adverse criticism in the book, and while there are too many omissions of reference to some common uses of certain drugs, the book is nevertheless the best one for general use known to us in America. Were we now about to buy a work on Therapeutics, &c., we should select this one.

Editorial.

CODE OF ETHICS—MEDICAL CONTRACTS.

An ordinance in the Plan of Organization of the American Medical Association (*Trans.*, 1874, pg. 557) provides: "*Whereas* The contract system is contrary to medical ethics, *Resolved*, That all contract physicians * * * * be classed as irregular practitioners." The Judicial Committee of 1874 supported this preamble and resolution, so far as they apply to *other* corporations or institutions "than those of a strictly charitable character." Exceptions, however, are made in favor of medical officers of the Army, Navy and Marine Hospital service "for reasons too obvious to require mention [?]." Practically, too, exceptions are made in every day life in favor of physi-

cians to penitentiaries, jails, work-houses, alms-houses, police forces, hospitals, dispensaries, etc.,—few of which appointments are of “a strictly charitable character.” Indeed, in almost every such instance, the physician is paid “a specified sum per month or year, without regard to the amount of medical services that might be required in the time specified.”

In examining this subject, we see no necessity for discussing the moral right, or even the propriety of contracts in general; we have never heard of any objection to them. Contracts are offered and accepted by every class of men. Doctors themselves are willing enough to engage their clergymen, lawyers, college professors, etc., involving more or less of service as circumstances may determine, for specified sums per month or year—thus virtually violating the grand principle which, they affirm, is immoral when applied to their own calling.

But there is a mis-statement of fact in the preamble quoted, which declares that “the contract system is contrary to medical ethics;” or else, the American Medical Association places itself in a very awkward and censurable light, as viewed, even, by its own “Code;” for the contract system *is* permitted to be enjoyed by *certain* medical officers, as above mentioned. There is nothing in true ethics which permits a wrong act, even that good may come of it.

There is still another view to take of this matter. It being conceded that the contract system in itself contains no wrong, and that contracts are permitted, under the “Code,” to *many* different parties, what can be the impropriety in allowing the contract system to extend to colleges, manufacturing corporations, mining companies, etc? Those who are interested in the success and prosperity of the institutions or companies referred to, and who are competent judges in the premises, affirm that such contracts would be promotive of their interests. Undoubtedly, States, counties, and cities are as competent and able to pay the regular charges of a physician *per visit* as are corporations or institutions. But more than this, in the case of inmates of penitentiaries, jails, alms-houses, etc., because of their personal confinement and depression of spirits, it is probable that there will be required within a specified time, a greater amount of professional services *per capita*, than would be the case with students in colleges, or workmen in manufacturing or other companies. The large death rate in penitentiaries, etc., might, at least, be taken as *prima facie* evidence of the correctness of this supposition.

While on this point, we wish to call attention to another view.

There is no evidence to show, or to justify the supposition that such contracts as are now permitted under the "Code" are more remunerative to the profession, than are contracts made with colleges, etc.; indeed, the opposite is usually the case. A State penitentiary, for instance, with, perhaps, 600 or more convicts, pays the physician, as the "fixed sum per annum;" not more than \$1,800 or \$2,000. On the other hand, we have never heard of a medical contract proposed by a college or company at a less rate than \$5 or \$6 per capita per annum. There is, then, no underbidding on the part of college contracts as compared with those offered by the State, city, county or hospital authorities.

The Judicial Council, however, argues that the contract-system violates "the rule that compensation for medical services should be in accordance with the kind and amount of services rendered." This argument might be silenced by quoting a portion of § 10, Art. II of the "Code," on *Obligations of Patients to their Physicians*, which states that the services of a physician "are of such a character that no mere pecuniary acknowledgement can repay or cancel them." If this clause be correct in its statement, how is it possible for the compensation to "be in accordance with the kind and amount of services rendered?"

It might also be urged as another complete reply to the argument made by the Judicial Council, that many contracts are already allowed by the "Code," which contracts are thought to be compensative to the official physicians. If, then, salaries compensate medical officers of the Army, Navy, penitentiaries, alms-houses, hospitals, etc., "*in accordance with the kind and amount of services rendered*," why may not even still larger salaries *per capita* prove likewise compensative to physicians, to colleges or to manufacturing, mining or other companies? A necessary deduction from this line of argument is that, either the "Code" and the interpretation by the Council are both wrong; or else that either the "Code" or Council is wrong.

But even this is not all we have to say on this point, which is the key stone in the argument. A few moments of calm reflection must convince any one that the premise assumed by the Council is faulty; hence the erroneous conclusions. The correct theory controlling compensation for professional services is *not* based so much upon the "kind and amount of services rendered" as upon a consideration of (1) the party who renders the services; (2) the surroundings of the party requiring the services; and (3) the circumstances under which the services are rendered. Our limited space does not allow us to

do more than merely illustrate the bearings and ultimate effect of these propositions: Dr. Brown-Séquard, for instance, because of his special studies, and his eminent position as authority, might reasonably charge a patient of extensive wealth and influence a fee of \$50 for a consultation regarding some nervous trouble, while another physician of the same community, but of less fame, might feel himself well "compensated" by a \$10 fee, for rendering exactly the same amount and kind of services. But the patient willingly assumes the extra expense, *oftentimes at the suggestion of a "regular physician" himself*, in order that he may obtain the special opinion of Dr. Séquard, although he may be as impotent as the other physician to relieve the trouble. The principle set forth in the propositions we have named is the one recognized by nearly all the other learned professions for the government of their charges; and how it is that the "regular" medical profession should have wandered off, is an enigma. A compulsory adherence to the incorrect theory of the "Code" lowers the calling of a physician to a mere trade. Hence results the injustice done the young physician, and to others in compelling them to adopt the same tariff as that used by the well established physicians of extensive and influential patronage. But our limits compel us to leave it to the reader to follow out this ruling of the "Code" to its other absurd results.

Let us hastily glance at the other objection mentioned by the Council to the contract-system. This objection is that "every individual and family should be free to choose their own medical attendant, without dictation or indirect restraint." This objection can be met by so many counter arguments or facts, that it is difficult to decide which to bring forward. Since, however, we wish to point out as we go along, some of the self-contradictions in the "Code," let us first see what it contains that bears on the point now being discussed.

Section 6, Art. I says: "Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice." Notwithstanding this declaration, which seems to us to be correct in principle, if a patient wishes to have, in consultation with his attending physician, another physician of recognized ability and moral character, who, however, is excluded from the National Association, solely because he violates a trivial and short sighted rule (advertising as a specialist, for instance—*Vide* pg. 557, *Trans.*, 1874), the patient's reasonable wish cannot be gratified—the consultation cannot be held with the physician chosen by the patient. The "Code" steps in, and places a direct restraint on

the patient's selection. If such restraint does not amount virtually to dictation, we would be glad to have our views corrected. What consistency there is in this "Code"! No contract service proposed by colleges, manufacturing companies, etc., would dare attempt to exercise such restraint over any of the students, employees, etc.

But there are exceptions to the rule laid down by the Council, that parties should "choose their own medical attendant without dictation or indirect restraint." In reference to colleges, for example, a majority of the students, as a general thing, come from distant sections, and have no knowledge whatever of the merits of the physicians in the neighborhood. In the event of sickness, it would be only a manifestation of interest on the part of the professors in the welfare of the student were they to caution him against such and such a physician of no ability, and advise that another physician be sent for; indeed, it is altogether proper that the student should seek the counsel of his preceptors in such matters. No unprejudiced observer can even deny that nearly every patient that comes under the care of a physician, is influenced either through "dictation or indirect restraint" from one source or another. If a visitor at one of the health resorts should need a physician, he is influenced in his selection in a manner that amounts to restraint or dictation by the recommendation of the proprietor. Indeed, the patient is generally afraid to accept the services of any one else not so recommended. Neither the Judicial Council, nor the profession generally, so far as we have heard, deny this right to the proprietor, nor disapprove of the statement in the advertisement of the resort that this or that practitioner has been appointed physician. Many similar illustrations will occur to the reader.

In the contracts of colleges, etc., the beneficiaries are under no *compulsion* to send for the selected physician. The physician so appointed, simply stands ready to answer the professional calls that may be made upon him. Yet, should the beneficiaries so desire, and their wealth justify it, they may send even to Europe for a physician.

We have heard the remark made, that it is singular that the young and inexperienced physicians should be so generally selected to fill contract engagements with colleges. We deny that less competent physicians are usually selected to fill these positions in colleges than those in the army, penitentiaries, jails, dispensaries, etc. In reference to Virginia institutions, at least; it may be said that the opposite of this assertion is true. Professors Cabell, Davis and Harrison, of the University of Virginia; Dr. Madison, of the Vir-

ginia Military Institute; Dr. Houston, late of Randolph Macon College; Dr. McIlhany, of Bethel Academy, etc., all rank among the leading men in the profession in Virginia. Some of these gentlemen indeed are among the few in our State who have gained a national reputation. The fact is, the Boards of Visitors or Trustees are to be commended for the remarkable excellence of their selections.

We can only *refer* to one or two other facts. The day has come when colleges and other institutions or corporations, looking to their own interests with no greater manifestation of selfishness than other parties, will have their own medical officers on the contract-system—code or no code. Year by year, this system is growing more and more popular, as its advantages in the instances referred to, are becoming more and more apparent. The “ethical” branch of the profession is powerless to check this “new development,” and we make ourselves ridiculous in the eyes of the world in trying to prevent its inevitable results. If the “ethical” practitioners will not accept the positions offered, there are numbers of other just as competent and worthy physicians, who owe no allegiance to the “Code,” who will accept the contracts. Thus of necessity the “outsiders” will receive the benefits and privileges of the paying offices, while we of the “regular” profession will be left to pick up the crumbs.

Under these circumstances, many a well qualified “regular” physician, who, however, is oppressed by poverty at home, and the “Code” in the profession, will look to some other source than his friends (?) in the American Medical Association for help or relief. He will sever his connection with the “ethical” branch of the profession, and go in search of an honest support for himself and family. Soon, it may be, he succeeds in obtaining, in a legitimate manner, a paying contract. Who, with a soul as big as a pin head (except the ethical branch of the medical profession), would not congratulate him, and rejoice with him in his success? No one can condemn his motive or his act. He has violated no technical or moral law; he has merely exercised his right or privilege. He is still recognized as a high-toned gentleman by all who know him. He adopts no exclusive dogma in practice. He is as good a physician as he ever was—indeed his newly gained advantages for adding to his experience and observation may have made him a better practitioner. Yet, simply because of the holding of a contract, no consultation can be held with him by a member of the “regular” profession—even though human life be at stake. Shall we still attempt to deceive ourselves and the public by the assertion that our sect of “medicine

is a liberal profession?" Such conduct as is necessitated by this "Code" must compel the loss of public "respect and confidence."

We have greatly exceeded the limits we desired to occupy. The importance of the subject must be our apology. As it is, we are compelled to omit even an incidental allusion to many points of great weight in the discussion. But our chief object is accomplished if we have claimed the attention of the reader, and induced him to study the subject without the bias of preconceived opinion.

Chorea: Its Cause and Treatment, is the title of a most interesting and instructive paper read by invitation, June 15, 1876, by Dr. George T. Stevens, of Albany, N. Y., before the New York Academy of Medicine. He states that "chorea is a functional disturbance of the nervous system, which may give rise to organic lesions, and which arises from irritation dependent upon anomalous refraction of the eye, and in a very large proportion of cases upon hypermetropia." He presents the record of 41 cases of chorea, taken without selection from his own experience and the experience of some personal friends to whom he had intimated his theory, and in every one of the 41 cases anomalous refraction occurred "as follows: hypermetropia, 27; hypermetropic astigmatism, 6; myopic astigmatism, 5; unequal degrees of myopia, 3; total, 41." As to treatment, the Doctor says: "The first and great indication is to correct the faulty refraction by the use of proper glasses. This will often, according to my own experience, relieve the patient at once. If glasses, for any reason cannot be supplied or used, the child's eyes may be covered; for it is a well known fact that when the patient with chorea sleeps, the choreic movements often cease; this is doubtless because the eyes are at rest."

"The calabar bean has of late years been found of value in the treatment of chorea; and when we remember that its peculiar and characteristic effect is to stimulate the ciliary muscle, we shall see that its use is rational.

"As children and others suffering from chorea usually also suffer from general want of vigor, tonics, chalybeates and arsenic are generally indicated."

In connection with this paper, we would like to direct special attention to the remarks of Dr. Ransom Dexter, of Chicago, (*Chicago Jour. Nerv. & Mental Diseases*, April No., 1874, pg. 175) in the report of *A Case of Chorea—A New Method of Treatment Suggested*. In addition to quiet, and the use of valerian, Indian hemp and bromide of potassium, he "ordered the blinds closed, kept her in a middle room of the house, and enjoined the most strict quietude in every particular, even to lying as perfectly still as possible upon a lounge, that the nerves of touch might not be wrought upon; also in every other particular pertaining to the five senses and muscular

motions. *** In eight hours after this treatment was instituted, we were impressed that a noticeable improvement had ensued; but within 24 hours thereafter, the improvement was a decided one. From that time the improvement continued rapidly, and in six days, all choreic movements had subsided."

It would appear from the reports of such cases that we are, at least, approaching a more satisfactory explanation, and a more speedily curative treatment of this disease.

Weekly Record of Prevailing Diseases.—There is nowhere a more efficient officer than Dr. Henry B. Baker, of Lansing, Secretary of the Michigan State Board of Health. His indefatigable, persevering energy leads him to override, it seems, every obstacle, and to improve, as far as possible, upon every practical suggestion relative to the duties of his responsible office. The result is, he has become, along with such men as Dr. Toner, of Washington City, one of the most useful men in the American profession, while, at the same time, he is daily adding to the material prosperity of his own State.

He has just prepared for distribution among those physicians of his State who will agree to fill and return them to his office, weekly blank records on postal cards of the prevailing diseases (not deaths) in their several districts. "It is hoped that by this means more timely information may be received concerning the occurrence and course of epidemic and other diseases, and that many diseases may thus be studied to better advantage." The suggestion is an excellent one, and the plan is altogether practicable. "It is not expected that positive and exact information on this subject can now be obtained; well-considered estimates are all that is asked. It is thought, however, that the chief medical officer of health in each city, and the prominent physicians who act as correspondents to this Board, can approximate the truth very nearly, each for his own locality; and that a series of such estimates for the year will furnish useful data for study."

A blank record in pamphlet form, "intended for the use and future reference of the person making it, and also to render it possible for him to replace any reports which may fail to reach the Secretary of the Board, and to be better prepared at all times to contribute useful information relating to public health," is also sent to the "correspondents." "A stamped envelope is also enclosed" for forwarding information or suggestions which cannot conveniently be placed at the bottom of the postal card blanks. If these blanks are lost, or should they be used, others will be sent.

Here is an example worthy of imitation by health boards all over the country. When the plan becomes generally adopted, then the American profession will make more rapid strides in perfecting the so-called science of medicine. The profession will, at least, have accomplished all that can be expected from statistics of prevailing diseases.

Improved Pneumatic Aspiration Apparatus.—The practical value of aspiration has become so generally recognized that the properly-equipped physician of to-day would as soon expect to be without his thermometer, or without his hypodermic syringe, as without his aspirator instrument. We have now to make our acknowledgments to Messrs. Codman & Shurtleff, of Boston, for the best aspirator we have ever seen; indeed, it seems to be perfect. It will be found figured in our advertising department. Nearly 1000 are now in use in America. They are the products of Messrs. Codman & Shurtleff, and are warranted in every respect. In some of the leading hospitals in Boston and elsewhere, this No. 1 instrument has superseded the more expensive and complicated ones, which latter are now laid aside. As an improvement made by Messrs. C. & S. upon the first of these instruments, they now pack the valves in the stopper and cock (supplied with the apparatus and figured separately by the side of the figure of the complete apparatus in their advertisement) with lead instead of leather, which, it is thought, will make this part of the apparatus practically perfect. Should any of the purchasers of the former style of packing be dissatisfied with the working of the valves, &c., we are authorized to say that the manufacturers will be pleased to substitute (without extra charge) lead-packed valves for those packed with leather on the return of the latter to the house.

We have not been requested by Messrs. C. & S. to make this favorable notice of their instrument. They have sent it for a notice just as publishers send their publications for notice—to be made according to our honest convictions as to the merits or demerits of the same. It is sent in no sense as a part payment even of the advertisement with which they have favored our journal. When an instrument-manufacturing firm are willing to submit their instruments to this kind of public criticism, just as publishers with their new books, our already high opinion of the house becomes more exalted. Messrs. Codman & Shurtleff, however, are already too well known throughout the country to need another word of favorable mention from us.

As the advertisement for this month of Messrs. Codman & Shurtleff relates exclusively to this instrument, we refer our readers directly to that for information as to the prices and advantages.

The Pinel Hospital, which we announced in our last number as being located near the Fair Grounds of our city, was formally opened August 2d. An elegant and sumptuous lunch was given the profession of Richmond and other guests, by the well-chosen Medical Superintendent, Dr. James D. Moncure. Although the Institution at that time was scarcely ready for patients, still, about twenty were registered from different sections of the State. Since the opening day a number of other applications for admission have been received. The total number of accommodations is about 50.

We are glad to record this almost unprecedented success of a new

enterprise of the kind in Virginia. There is now no longer any need of sending patients and money out of the State. The Board of Directors consists of Drs. J. B. McCaw, J. S. Wellford, I. H. White, F. D. Cunningham, C. W. P. Brock, J. D. Moncure; also, M. A. Moncure, J. J. A. Moncure, A. Y. Stokes, and Gen. Joseph R. Anderson, whose names are a guarantee to the public of the proper business and medical management of the Institution.

After the feasting was over on the opening day, the following resolution on the part of the large number of visitors, was offered by Dr. F. B. Watkins, amended by Dr. L. S. Joynes, and then unanimously adopted:

Resolved, That the Pinel Hospital, under the medical superintendence of Dr. James D. Moncure, has the entire confidence of the medical profession of Richmond; and that the profession hereby pledges their cordial support and co-operation to this Hospital.

Resolved, That the thanks of the profession are due, and are hereby extended, to the City Council of Richmond for the support they have extended to this laudable enterprise.

Resolved, That a copy of these resolutions be forwarded to each of the city papers, and to the *Virginia Medical Monthly*, with a request for their publication.

The Toner Library.—Dr. Joseph M. Toner, we learn from the *Washington Evening Star*, has offered as an inducement to the physicians of Pittsburg, Pa. (his native city), to found a medical library, to donate his medical library, valued at \$20,000, upon the conditions that a fire-proof building be erected for the library, and that it be called by his name. He further agrees, if his proposition is accepted, to donate a sufficient sum of money to secure to the library an annual lecture on medical or scientific subjects. This library is, perhaps, the best private medical library in the country, containing, in addition to nearly all the contributions of American authors to medical literature, almost complete files of all American medical journals.

We fully endorse the remark of the *Star*, "that the conditions named by the donor are reasonable and proper." "The medical profession in Pittsburg are not wise in not at once accepting the offer as made." This magnificent offer is but another evidence of the great liberality of the donor, and of his devotion to the interests of the medical profession. Were the many excellences of his head and heart less generally appreciated, and were his personal character less beloved by a grateful profession, the occasion here presented might lead us to say more. As it is, however, another word would seem as fulsome compliment to one who is already known as a great and good man.

Dr. C. C. Vanderleeck, No. 1121 Walnut street, Philadelphia, Pa., requests physicians all over the country to send him reports of cases of *Hysteria in Males*; also, instances of *Idiosyncrasies in Regard to the Action of Drugs upon the Human System*.

Hygeia Hotel.—In view of its importance to public health, we take pleasure in calling special attention to the advertisement of the Hygeia Hotel, the object of which advertisement is explained in the accompanying private note from the Proprietor, Mr. H. Phœbus:

Dear Sir,—Thanking you for the commendatory notice of the Hygeia Hotel in your issue of August, now before me, but knowing that in the minds of some who have not investigated the subject an impression exists that it is not healthy here during August and the Fall months, I beg to hand you herewith copy of a circular I have recently prepared for general distribution, in which such eminent physicians as Dr. R. Archer, of Richmond, and Dr. F. Mallory, of Norfolk, twenty years ago, and Dr. G. Wm. Semple, of Hampton, still later, have strongly endorsed the healthfulness of the place, particularly at the seasons named, and ask that you will give their letters space in your columns, and oblige,

Respectfully, yours,

H. PHŒBUS.

Old Point Comfort, Va., August 7, 1876.

Medical Society of Virginia.—The usual circular announcement of the session of this Society, to convene in Charlottesville, Va., October 17th, 1876, will be issued in a few days. A letter from Dr. John S. Apperson, Town House P. O., Smythe Co., Va., Chairman of the Necrological Committee, requests parties to report to him any death of a Fellow of the Society that may have occurred during the year. It is otherwise impossible for him to collect the facts, except by mere accident.

Dr. Greenville Dowell's Work on Yellow Fever will be issued in a few days. His personal experience with the disease of which he writes adds importance to this publication. For a month or so, letters for Dr. Dowell, addressed to 1338 Pine street, Philadelphia, Pa., will receive prompt attention. After that time, his correspondences should be addressed to his home in Galveston, Texas.

Corrigenda.—A few among the many typographical errors in our last issue which we wish to correct are: Page 332, first word of first line, for "tannin" read *taurin*; same line, for "have been" read *have here shown*, &c.; for "Franssig," "Monneæt," "Scharrenbeich," "Parisi," "vines," "Thaü," wherever they occur, read *Faus-sig*, *Monnerèt*, *Scharrenbroich*, *Pavisi*, *wines*, *Than*. Our friends can often avoid seeing many such errors by writing very plainly each letter of a proper name, technically, &c., and the rest of the article should be written legibly.

The Physician's Visiting List and Complete Pocket Record, prepared by James I. Hale, M. D., Anna, Ind., contains 32 leaves (64 pages) ruled across the page (thus allowing more than the usual space in other lists) for the number and names of patients, for days

of the week, and also columns for receipts, and remarks and memoranda. The head line reads, "*Record for the month of _____ 187__.*" The book also contains a pocket for the keeping of papers, &c., and is furnished with a pencil. It can be begun with on any day of any week, and is continuously good until filled. The book contains no tables, no calendar, no advertisements. It is a "simple and efficient" *Visiting List*.

Fluid Extract of Eucalyptus Globulus in Dropsies.—Dr. J. B. Leary, in the *Proceedings of the Medical Society of King's County* for September, says that nearly four years ago he prescribed eucalyptus as a specific in gonorrhœa. Then he noticed, also, its remarkable diuretic effect. He now reports the more remarkably successful use of ten-minim doses of the fluid extract in four cases of dropsy of long standing—the dropsy in one case being due to Bright's disease; in the second to cardiac hypertrophy by dilatation; in the third to cardiac disease; and in the fourth to cardiac hypertrophy. The doses were never increased beyond ten minims three or four times a day, but in some cases diminished to eight minims—the system at no time tolerating it.

The Doctor adds that he has also given the medicine in a great many cases of passive congestion of the kidneys, and always with benefit. Patients while taking the drug would sometimes complain of a very severe congestive headache, accompanied with tinnitus aurium. The appetite was improved, and in some cases a laxative condition of the bowels was produced.

It should be remembered, in prescribing it, that the drug contains a resin which is precipitated by many other agents. Dr. Leary's most frequent combination was with digitalis.

Pharmaceutical Products at the Centennial.—Messrs. Billings, Clapp & Co., of Boston, make an exhibit which, for beauty of arrangement, variety and costliness of products, is very creditable to the country. They exhibit more than 60 specimens of the products of their laboratory. Among other things, they have the only specimens of propylamin and its compounds on exhibition. It is said that the three bottles of it on exhibition cost more than \$2,000.

The Proceedings of the Richmond Academy of Medicine for the past four meetings have been so completely occupied with matters of local interest as not to be profitable to any one out of the city. Hence the absence of reports from our column.

The Present Number contains 80 instead of 76 pages, and though much of the type is of reduced size, and the "leads" taken out, there is much matter that we are compelled to omit.

MORTUARY STATISTICS FOR THE MONTHS OF MAY, JUNE AND JULY, 1876.

Heat Stroke.....	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
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*Color not given. †No July reports—Petersburg, as announced in August No., has discontinued mortuary statistics. ‡Report only for May. §Blansburg makes no color classification—though the statistics are presumably for whites. ¶All heat strokes occurred during July.

In Richmond, there were three deaths from scarlatina.

In Mobile, there were fifty-three deaths from measles.

VIRGINIA MEDICAL MONTHLY.

VOLUME III—No. 7.

WHOLE NUMBER 31.

RICHMOND, OCTOBER, 1876.

Original Communications.

ART. I.—(1) *Typho-Malarial Fever—Diagnosis between it and Typhoid Fever.* (2) *Pneumonia at the Apex of the Lung—Diagnosis and Remarks.* A Clinical Lecture by ALFRED L. LOOMIS, M. D., Visiting Physician to Bellevue Hospital; Professor Theory and Practice of Medicine, Medical Department University of City of New York, etc. (Phonographically reported by a Special Reporter.)

Typho-Malarial Fever—Diagnosis between it and Typhoid Fever.—J. B., æt. 36, was admitted to the hospital April 11, 1876, and gave the following history of his case: He had been sick three weeks; the prominent symptoms had been a chill, followed by pain in the head, limbs and back. There had been no nausea or vomiting, but during the early part of his sickness, there had been slight diarrhoea. Upon the day of admission, he had two watery, painless discharges from the bowels, containing a small amount of blood. After lying in bed a few days, he was able to get up and go to his business (clerk), but was soon obliged to return home on account of the pain in his head and back; the latter had continued up to the time of his admission to the hospital. During all that time, three weeks previous to admission, he had had more or less of fever, and the day before coming in he had called a physician, who “gave him something to reduce it.” He had also gradually lost flesh and strength, and when admitted was unable to walk or stand.

On the day of admission, his axillary temperature was $102\frac{3}{4}^{\circ}\text{F}$. at 4 P. M.; 104° ; at 6 P. M.; with treatment, 101° ; at 9 P. M.

April 12. Temperature at 6.30 A. M., was $102\frac{3}{4}^{\circ}\text{F}$.; at 10 A. M., $103\frac{1}{2}^{\circ}\text{F}$.; at 3.30 P. M., $102\frac{3}{4}^{\circ}\text{F}$.; at 5.30 P. M., 105°F .; and at 8.45 P. M., 100°F —the fall being due to treatment.

April 13. Temperature at 6.30 A. M., was 100°F. ; at 3.30 P. M., $102\frac{3}{4}^{\circ}$; at 6 P. M., $103\frac{1}{2}^{\circ}\text{F.}$; and at 9 P. M., 101°F. To-day the patient lost $\bar{3}\text{viiij}$ of blood by the bowels.

April 14. The thermometer stood at 102°F. at 6 A. M.; at 101°F. at 9 A. M.; at $102\frac{1}{4}^{\circ}\text{F.}$ at 2 P. M.; and at $102\frac{1}{2}^{\circ}\text{F.}$ at 8 P. M.

April 15. His temperature at 7 A. M. was $102\frac{1}{2}^{\circ}\text{F.}$; at 5.30 P. M., $104\frac{1}{2}^{\circ}\text{F.}$; and at 9 P. M., 102°F.

April 16. At 9 A. M., his temperature was $102\frac{1}{2}^{\circ}\text{F.}$, and at 3 P. M., $103\frac{1}{4}^{\circ}\text{F.}$

April 17. His morning temperature was $101\frac{3}{4}^{\circ}\text{F.}$, and afternoon temperature 104°F.

April 18. At 6 A. M., his temperature was $101\frac{3}{4}^{\circ}\text{F.}$, and at 3 P. M., 103°F.

As far as could be determined, there had been no regularity with regard to exacerbations and remissions in temperature, and the apparent remissions, as recorded in the hospital, were unquestionably due to the treatment to which he was subjected, which will be stated hereafter.

Present Condition.—Countenance rather bright; it does not present the appearance of that of a very sick man; tongue dry in the centre and slightly brown; moist upon its edges, and a trifle tremulous; pulse, 108, soft, full and easily compressed. Abdomen uniformly distended; tympanitic over its entire extent, and gurgling could be produced upon pressure in the right iliac fossa.

Scattered over the whole abdominal surface, extending upon the chest, and seen upon the back, are brownish spots, about two lines in diameter that do not disappear upon slight pressure. The patient has not had any cough or expectoration during his entire sickness, nor has he had delirium. He was quite deaf to-day, but whether the deafness was due to the treatment or to the disease is a question.

Comments.—The leading point of interest in this case relates to diagnosis. The man has been sick three weeks; his sickness commenced with a chill and irregular fever, which was accompanied by pain in limbs, back and head. From the very onset of the attack, he has gradually lost flesh and strength. At the present time, he has a brown, dry tongue, a feeble, full pulse—the fulness of the pulse probably being due to the effect of stimulants—a tympanitic abdomen, gurgling in the right iliac fossa, an eruption that has continued since its appearance, and of a brownish color, a slight diarrhoea; at one time he had bloody discharges from the bowels.

The question now arises, with what type of fever is the patient suffering? The irregular variations in the temperature do not preclude the possibility of its being a case of typhoid fever, although the thermometric wave was far from being typical. If the case is one of typhoid fever, the patient is in the third week of the disease, and a more marked decline in temperature might be expected than has occurred; for the temperature in that disease, as a rule, reaches its maximum by the end of the second week, commences to decline in the first part of the third, remits in the third, and intermits in the fourth. Not having a record of the patient's temperature during his first week's sickness, however, the thermometric record since his admission to the hospital has lost very much of its value as an aid in diagnosis. The tympanitic distension of the abdomen and the gurgling in the right iliac fossa points in the direction of typhoid fever; but when the remissions in a case of remittent fever have disappeared, and the fever has become continued, it is maintained that, in a majority of cases, both those symptoms are present. The same might be said concerning the diarrhoea; but the hæmorrhage from the bowels points toward typhoid fever. The conditions in the abdomen are not, however, proofs positive that the case is one of typhoid fever. The brown, dry tongue might be present in either typhoid or remittent fever, particularly when the latter has become continued. Deafness, also, might be present in both diseases. The eruption does not present nearly so bright an appearance at the present time as when the patient was first admitted to the hospital, nor does it disappear as easily upon pressure; it is now unaffected by *slight* pressure. The spots do not present any of the characteristics of the rose-colored eruption of typhoid fever, for they are quite brown in color, and the same spots which were present when the patient was first admitted to the hospital are now visible. There is nothing, therefore, in the eruption by which a diagnosis of typhoid fever can be made. The patient had a distinct chill at the outset, which may be regarded as evidence against typhoid fever. Since his admission to the hospital, he has had chilly sensations, which, as a rule, are followed by a rapid rise of temperature. Chilly sensations, rather than distinct chills, may be regarded as characteristic of typhoid fever. The gradual approach of the

disease in this instance is evidence in favor of typhoid fever. On the other hand, the symptoms of remittent fever, as detailed, are early gastric disturbance, a certain amount of lassitude, pains in the limbs, &c., but when the disease really comes, it comes with a short, sharp advent, marked by a distinct chill in almost every case.

Now, the patient before us had a well-marked chill, but he had no gastric symptoms whatever. It is further stated, that with the chill there is commonly pain in the head, back and limbs. The patient suffered severely from these. In a well-developed case of continued remittent fever after the chill, there is a rapid rise in temperature, perhaps reaching 106°F. , within twelve hours from its commencement—ordinarily, though not necessarily, attaining its full severity within the first twenty-four hours. Following the pain comes a remission, but there is at no time a complete absence of febrile movement, and in that sense we have a continued form, with distinct remissions and exacerbations. Whether such a condition had been present in the early history of the case before us is not known, for no thermometric record had been made. As a continued remittent progresses, the remissions become less and less marked, the exacerbations more severe, appearing at an earlier hour each day. At the end of the first week, as a rule, the remissions entirely disappear, and the fever becomes continued. When the fever has become continued, the general condition of the patient becomes changed. The skin will be found steadily hot and dry, the tongue constantly brown and dry; quite probably there would be sordes upon the teeth; whereas, in the earlier stage, the skin and tongue become moist during the remissions.

When the patient has reached this condition, his disease could be dignified by the name typho-malarial fever. The patient now evidently is in a typhoid condition, but whether this condition has followed a regularly developed attack of remittent fever, or not, is the question.

The query naturally arises, Is there any means by which a positive diagnosis can be made under these circumstances? It was suggested that, if the patient had been living in a malarious district, it would be altogether probable the case was one of remittent fever, which had become continued until the patient had

reached a typhoid condition. The suggestion was regarded as a valuable one; but, at the same time, it did not exclude the possibility of his having typhoid fever, even though he lived in a malarious district. It was not determined that the man had been living in such a region. Again, it was suggested that a microscopical examination of the blood would assist in making a positive diagnosis. That suggestion was regarded with special favor; for it was held that pigment granules could be detected almost invariably in the blood of a patient who was in a typhoid condition secondary to remittent fever—thus enabling the physician to make a positive diagnosis between remittent and typhoid fever. Dr. Goldthwaite, House Physician, had made a microscopical examination of the patient's blood, and pigment granules were found. That fact was regarded as strong evidence in favor that the man was suffering from remittent fever.

The case illustrated the difficulty that sometimes arises in making differential diagnosis between typhoid and typho-malarial or remittent fevers. With Professor Loomis, however, the conviction had become more and more firmly established that typhoid fever depended upon its own specific poison, and that, unless the disease was prevailing, and a distinct typhoid eruption could be seen—such cases, for example, as the one before us—should be placed under the head of typho-malarial or typho-remittent, rather than under the head of typhoid fever. Positive diagnosis, however, in such cases, was regarded as exceedingly difficult.

Treatment.—When admitted to the hospital, the leading symptom in the case to be overcome was the high temperature. For that purpose, quinine could be administered and cold water employed, without reference to its being due to typhoid or remittent fever. So far, diagnosis was not important. But the patient had had neither quinine nor cold applications, and yet the temperature had been reduced without difficulty. Warburg's tincture had been employed, and the temperature had been effectually controlled by the use of three or four doses, one drachm each, and had fallen readily whenever the remedy had been used. The tincture was the treatment for remittent fever; and in the case before us the temperature had been controlled by the remedy. The diarrhœa, also, had gradually diminished, and the

general appearance of the patient had improved. In addition, he was receiving abundance of milk and lime water, and two drachms of brandy every two hours.

During the succeeding seven days, the patient remained in very nearly the same condition—the temperature ranging from 101°F. to 104°F.; and when [reduced by the tincture, it remained so for only a short time; the pulse was irregular, occasionally intermittent; no diarrhoea since last week; abdominal symptoms were less prominent; he was evidently losing strength, and was slightly delirious. He was in the fifth week of his sickness. Within the sixth week, the patient died.

At *autopsy*, twelve hours after death, the following lesions were found: Quite extensive ulceration in the ileum, near the cœcum; the ulcers were circular, *i. e.*, extended in the direction of the circular fibres of the intestinal wall; had elevated edges, and bases quite indurated, showing that the process had been one of considerable duration. Other changes, belonging among the characteristic lesions of typhoid fever, such as enlargement and softening of the spleen, etc., were not present. There was, however, pigmentation of the liver, which belonged to malarial rather than typhoid fever. The autopsy, therefore, seemed to prove that the patient had died of typho-malarial fever.

Pneumonia at the Superior Portion of the Lung.—*History.*—A male patient, æt. 34, who had been in the habit of “taking a drink when the opportunity was offered,” and had had rheumatism more or less all winter, went up town on a Friday, “got over-heated,” drank freely of cold water, and about four or five hours afterwards began to shake violently with a chill, which lasted about twenty minutes. Immediately succeeding the chill, he had pain in the back and head and all over the body, but he was not certain whether he had fever at the same time. He had only “hacked” a few times, but had not had any expectoration. At the time of his examination, he was in the fifth day of his sickness; had felt unable to move on account of “the pain in his bones;” had lost his appetite, and was thirsty. The patient attributed the pain to rheumatism, but it was found that his rheumatism had always been confined to the right side, where a deformity existed, which had followed an injury received when he was a young man. The rheumatism, therefore, became a mooted question.

Present Condition.—Face only slightly flushed; inspiration

hurried (48), and chiefly abdominal; temperature, $104\frac{1}{4}^{\circ}\text{F.}$; pulse 114, full, easily compressed and regular; tongue slightly coated.

Physical Examination.—*Inspection*, negative. *Palpation* revealed slight increase of vocal fremitus upon the right side. *Percussion* revealed normal resonance over both lungs at the lower posterior portion, but slight dullness over the scapula upon the right side when a forcible blow was struck. Anteriorly, the percussion note was normal over both lungs. Upon *auscultation*, bronchial râles were heard over both lungs; bronchial respiration, mixed with a breezy respiration, over the scapula on the right side, and vesicular respiration over the remaining portions of the chest, both anteriorly and posteriorly. When made to cough, however, there could be heard, over a limited area in front, at about the level of the third or fourth rib, fine, crackling sounds; heard at the end of inspiration, sub-crepitant râles, but whether they were produced in the lung or in the pleura, the Professor did not feel able to say.

Diagnosis.—Slight pneumonia at the superior portion of the right lung.

Comments.—The above case was interesting in several particulars. First, it illustrated the impossibility of making a diagnosis in certain cases without physical examination. Second, it illustrated how few symptoms might attend the development of a pneumonia. After the descriptions ordinarily given of pneumonia had been read, the student might regard it as rather strange that the disease should be developed with so few positive symptoms as were present in the case before the class. In the first place, the patient had had a chill, which would be expected in a case of pneumonia, but it had not been followed by febrile excitement, was not accompanied by pain in the side, nor had it been succeeded by expectoration; in short, really nothing in the history, except the chill and a notably slight cough, would lead to the suspicion that pneumonia was being developed.

The history was also equally strong against the probability of the case being one of pleurisy; for the occurrence of acute pleurisy in a moderately healthy person without pain in the side, of a catching character, was believed to be exceedingly rare. Then came the pulse; but a pulse numbering 114 might be met with in a great number of diseases.

The character of the respiration excluded general capillary

bronchitis, for it was only hurried, and not labored. Bronchitis develops a labored respiration, while pneumonia gives rise to rapid breathing; if dyspnoea was present, it depended upon the susceptibility of the nervous system of the individual affected rather than upon the amount of lung tissue involved by the inflammation; that is, severe dyspnoea might accompany a small amount of pneumonia. The respiration present pointed to pneumonia.

With reference to the temperature, the fact that it had reached $104\frac{1}{2}^{\circ}\text{F.}$ was regarded as sufficient to exclude pleurisy or bronchitis. Even in capillary bronchitis, the temperature, it was said, rarely rose above 103°F. , and reached that degree in pleurisy only when pus was the product of the inflammation; then it might rise as high as 106°F. , or even higher.

Then came the physical examination; there was absence of signs of disease in the lower portion of the chest; there was only a very moderate amount of dullness over the scapula upon the right side, not sufficiently marked, however, to indicate complete lung consolidation; and there was bronchial breathing over the region which gave the slight dullness, but mixed with it was a breezy respiration; and when the patient was made to cough, fine, crackling sounds were heard anteriorly, leading to the suspicion of pleurisy.

There were two conditions in which pneumonia at the superior portion of the lung might be expected. It had been very commonly stated that pneumonia was rarely developed at the apex of the lungs unless there was a phthisical tendency behind it, and its occurrence in that region of the chest had been regarded as an indication that phthisis either preceded or was to follow its development. After a time, it was determined that, in a majority of cases, pneumonia, developed in connection with alcoholismus, attacked the superior portion of the lungs.

Prof. Loomis seemed to be of the opinion, based upon his hospital experience, that pneumonia occurred about as frequently at the apex as at the base of the lungs; at least, the occurrence of superior pneumonia, independent of phthisis or alcoholismus, was exceedingly common. He had certainly abandoned the idea that the fact of a man's having a pneumonia at the apex of the lung rendered him any more likely to have phthisis than if he had

had his pneumonia at the base of the lungs; for resolution had almost always occurred in the many patients with alcoholismus and superior pneumonia that had fallen under his observation, although in many cases it had been considerably delayed.

He had also observed that the dyspnœa was, as a rule, much more marked, and the respiration much more hurried, when the pneumonia was at the apex than when at the base of the lung. The following day there were found well marked signs of pneumonia at the apex of the left lung; not extensive, but sufficient to furnish unmistakable evidence, and the temperature was 104°F.

The treatment adopted was to keep the patient in bed, give a nourishing diet, and the temperature was controlled by the use of large doses of quinine. Five days subsequently, the temperature was 99°F., and the pneumonia was resolving.

ART. II.—*A Case of Hydrophobia—With Remarks.* RICHARD A. CLEEMANN, M. D., Physician to St. Mary's Hospital, Philadelphia, Pa.

Hydrophobia is so rare a disease, and is yet invested, by its terrible fatality, with so much interest, that the record of the following case, not long ago observed, can hardly fail to be acceptable to the readers of the *Monthly*:

On February 15, 1876, I was asked by Dr. Geo. A. Rea, of Philadelphia, to see with him a boy named David Anderson, æt. eight years. The little fellow, it was said, had been very restless during the night of the 13th, which prompted his mother the next morning (14th) to give him a dose of castor oil. This moved the bowels freely; but the mother recalled afterwards that the boy manifested some difficulty in swallowing it. In the afternoon of this day (14th) spasmodic symptoms manifested themselves, and Dr. Rea was sent for, with the intimation that the child had been seized with convulsions. The Doctor saw at once that the muscular disturbance was very different from that of ordinary eclampsia; and on the next morning (15th), more characteristic symptoms having, meanwhile, developed themselves, made inquiry as to any history of dog-bite. It was then brought to mind that the little boy had come in from the street some six weeks previous with a little blood upon his face, which, he said, came from the bite of a stray dog, the scar of which

had disappeared; the blood had been simply washed from his face by the mother, and the circumstance forgotten.

When I entered the patient's room with Dr. Rea, the unfortunate boy was held in the arms of his mother, who, with the assistance of a neighbor, endeavored in vain to restrain the convulsive jerkings of his limbs and body. The muscles of respiration were spasmodically contracted, so as to render his breathing labored, and even speaking difficult. In a broken sentence, with sharp enunciation, he complained that "wind was choking him up." His countenance expressed anxiety; his pupils were widely dilated; his mind was evidently clear. It was suggested, with the view of diminishing the causes of reflex irritation, that he be placed upon the bed. When this was done, and he was kindly spoken to, he became perfectly quiet; but even the act of exciting his attention in any way was accompanied at once with a recurrence of the convulsive movements, while laying the hand upon the chest produced immediately contraction of the respiratory muscles. When asked if he would take some water, he started up with an expression of terror, retreating towards the wall against which the bed was placed. His attitude and progression were peculiar; his spine was abnormally curved backwards; his knees a little bent; his feet apart; his legs tottered under him as he advanced, and he outstretched his arms as if to aid in balancing himself. He agreed to take some ice cream; but when this was offered to him, he was up and away as before. Soon, however, commanding his resolution, he took the spoon containing it in his hand; this he held unsteadily for a little while, dropping a part of its contents on his clothing, till suddenly, as with a supreme effort, he darted it into his mouth; then followed a gasp, contortion of the features, with staring eyes, great beads of perspiration bursting from his brow. But he got the ice cream down. His pulse was beating at the rate of 144 to the minute; his skin was hot to the touch; the ordinary axillary thermometer, used with difficulty, rose to 103°F.; his bowels had been moved earlier in the morning. The child was naturally of a nervous temperament, and had suffered in the past from attacks of nervous disorder; a neighbor said he was not "right."

At 4 o'clock P. M., I saw the little patient again. He was on his bed in a kneeling posture, with the room darkened, for the light from the windows distressed him—causing reflex movements; he even asked to have the doors of the stove closed, since the rays from the live coals within had the same disagreeable effect upon his hyperæsthetic retinae. When a cup of water was now put to his lips, he would quickly clap his hands to his mouth

as if to prevent the ejection of the liquid, and with great effort succeed in swallowing it. He was constantly hawking to rid his throat of a tenacious secretion, and removing the same with his fingers from the mouth. When addressed, he spoke out in the same sharp, abrupt way above noticed.

Curiously, he seemed to obtain comfort from his mother's holding his head between her hands (over occiput and brow), for he urged her to continue this. His pulse still counted 144; the temperature was recorded at 102°F.; but it was difficult to take this exactly: for the boy seemed frightened at the instrument, screaming out that it hurt him, and his extreme restlessness prevented its satisfactory adjustment and immediate reading on removal.

At the next visit, at 8 P. M., the child was found out of bed, supported by his mother, he having felt an inclination to go to stool. Placed again on the bed, he lay quite quietly—his face wearing a more natural expression. During our absence, he had eaten something, and had swallowed some milk without difficulty. The constant ejection of the secretions from his mouth continued. It was observed that his eyes were "watery," but the conjunctiva were not injected. A self-registering axillary thermometer now recorded the high temperature of 104.2°F. In a short time, a paroxysm of general convulsions took place. This was followed by several more—the child seeming to have his consciousness between the seizures, even smiling on one occasion.

Death took place at 11 P. M.—the eclampsia recurring to the end.

There is nothing special to be said with regard to the treatment of the above case, unless it be a reference to a doubtful experiment made with amyl nitrite. Casting about at the afternoon visit for some new resource, since so far everything given in the disease had failed in averting death, the powers of that drug in resolving spasm, which had lately been demonstrated in various diseases,* suggested its trial. Three drops were placed in a handkerchief, and applied to the boy's nose. This occasioned resistance on the part of the little patient, who declared it hurt him; afterwards the pulse had fallen to 120 (from 144), and swallowing was easier. The dose was repeated once or twice, but the struggles of the child against its administration were so painful to the mother (an ignorant woman), that the experiment was abandoned. Notwithstanding that an amelioration

*As, for instance, in a case of tetanus successfully treated by Dr. Wm. S. Forbes, of Philadelphia, *Trans. Col. Physicians, Philadelphia*, 3d series, vol. 1, 1875, p. 121.

of the symptoms, especially in the difficulty of swallowing, is observed before the closing scenes in cases of hydrophobia, the rapidity with which the apparently favorable change followed the administration of our drug, would seem to warrant a further trial of it in a case with more tractable surroundings.

In the last number of the *American Jour. Med. Sci.* (July, 1876,) Dr. B. A. Watson, of Jersey City, reports "A Supposed Case of Rabies Canina Treated with Strychnia and Woorara," in which recovery took place. Dr. Watson is himself certain of the diagnosis, though the case was not a fully developed one—some very prominent symptoms being wanting; as, for instance, difficulty in swallowing liquids, hyperæsthesia of the retina and of the cutaneous surface to the touch, marked spasm of the voluntary muscles. The recognition of the disease was based on a transient pain near the seat of a comparatively recent dog-bite, anxiety of the patient, apprehensiveness, loquacity, gastric disturbance (which was excessive), "sighing" respiration, "tightness" over the præcordial region, aerophobia (first described as a slight shuddering), thirst, expectoration of tenacious saliva, paroxysms of dyspnœa (described as constrictions of larynx, trachea and lungs), muscular twitchings. And it was known (this knowledge, apparently, being stated by the patient) that a maid servant, who had been bitten by the same dog about the same time that the patient had received his injury, had recently died of unmistakable hydrophobia. This latter case is also reported in the above quoted journal, immediately following that of Dr. Watson. Both cases seem to be very carefully and most conscientiously described; it must be confessed they present very different pictures of one disease. Subcutaneous injections of curare, to which the cure in the above successful case was chiefly attributed, have before been used without any satisfactory results,* and as a palliative to the symptoms in rabies, have been considered inferior to some other therapeutic measures, as, for instance, the inhalation of chloroform.†

*Bollinger Ziemssen's *Cyclop. Pract. Med.*, Am. Ed., Art. Hydrophobia, vol. iii, p. 510.

†[It has been suggested that one of the causes of failure of woorara is due to the small doses which have been used. From $\frac{1}{4}$ to $\frac{1}{2}$ grain at least might be safely used hypodermically in this disease, as Echeverria and others have used it in much larger doses in epilepsy and other nervous disorders.—EDITOR.]

ART. III.—*A Contribution to the Histology of Epithelial New-Formations.* By WM. C. DABNEY, M. D., Charlottesville, Va.

No part of pathological histology has of late years received so much attention as the subject of epithelial new-formations, or, as they are more generally called, *cancers*. The impropriety of this latter name has frequently been remarked, but it still remains in general use.

For a time it was supposed that cancers were composed of cells peculiar to them, and it was thought that it would be easy to determine, on microscopic examination of a morbid growth or its juice, whether it was cancerous or not. It was soon found, however, that the cells of cancer were in no way different from other epithelial cells, and hence the idea of diagnosing a cancer by the examination of individual cells, of which it was, in great part, composed, had to be abandoned.

More recently, pathologists have observed that, as a general rule, in so-called epithelial cancers, the cells have a peculiar, nest-like arrangement at certain points, and the majority of recent writers seem to think these "nests" characteristic of the form of morbid growth. Especially is this the case with the German school of pathologists. Rindfleisch (*Pathological Histology*, p. 175) says: "The arrangement of the epithelial cells upon the cross sections of the projections is characteristic. *** One remarks everywhere a tendency to concentric stratification."

Billroth, while not stating positively that he considers the epidermic globes characteristic of cancer, yet implies that such is his opinion. He says: "Subsequently changes take place in these epithelial tubes; groups of cells unite and form globules, which gradually grow by the deposit of new cells in the form of flat epithelium, and thus form the cabbage-like, compound epidermis globules (globules epidermiques, canceroid globules, epithelial pearls) which so much excited the astonishment of the first person who examined them." (*Surgical Pathology*, p. 631.)

Green (*Pathology and Morbid Anatomy*, p. 160,) speaks of them as the concentric globes or epithelial nests, which are so characteristic of epithelioma. I have not had access to the works of Wilks, and Moxon, and Wagner, and consequently do

not know what views are held by these eminent pathologists, whose books have recently appeared.

Dr. J. J. Woodward, of Washington, in his admirable "Toner Lecture" on the *Structure of Cancerous New-Formations*, pays most attention to the mode of growth of these tumors, and does not state definitely whether he considers the epithelial "nests" characteristic of cancer.

Gross (*System of Surgery*, vol. i, p. 261) speaks of this arrangement as very characteristic of, but not entirely peculiar to, this form of carcinoma (epithelioma).

Ashurst (*Principles and Practice of Surgery*, pp. 491-492) mentions as one of the "characteristic structures of epitheliomata," laminated capsules or nests, or epidermic or concentric globes, consisting of concentric layers of epithelial scales containing in the central space granular or oily matter cells or free nuclei, and apparently resulting from a continuation of the process of endogenous cell formation.

Erichsen, while he describes these nests with accuracy, states at the same time, that a false nest is frequently observed in papillary and glandular growths. There is, however, he thinks, a total difference in the mode of development in the two cases. In epithelioma, the nests are formed by the central proliferation of the cells, and the pushing off of the surrounding cells; whilst in the papillary and glandular tumors the arrangement is due to the development of cells in limited spaces, and consequent concentric pressure.

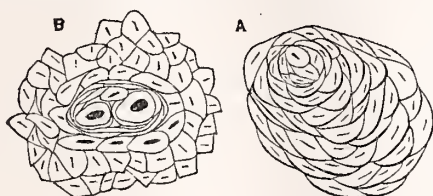
Paget, although he does not state their mode of formation, says that these nests may be found in papillary growths.

There can be no doubt that the great majority of physicians engaged in general practice, who use the microscope at all, look upon the nest-like arrangement of epithelial cells as characteristic of cancer, and generally of the "epithelial" variety, so-called. This is the teaching, as we have seen, of those works on pathological histology which are most used in this country, and such were the views which I had been led to adopt in consequence, till a few months ago, when, on examination of an ordinary wart removed from the penis, I found a nest of cells, which I could in no way distinguish from those known to occur so commonly in epithelial cancer.

The little growth was about the size of a large English pea, and was attached to the prepuce by a broad pedicle. On removing it, and making a section parallel with the little papilla of which it seemed to consist, I found it to be composed of epithelial cells, which had, in most parts of the section, no definite arrangement, but at quite a number of points they were arranged in nests which were composed generally of flattened cells on the outside, with globular ones in the centre, while beyond the limits of these nest-like arrangements, the cells were of irregular shape, and had, as previously stated, no definite arrangement. The whole tumor seemed to be composed of cells, and there were no

cylinders to be found—it being, in this respect, entirely unlike the generality of epithelial cancers.

The accompanying cuts show the microscopical



appearance of two sections.

A careful examination of a number of sections taken from this papillary new-formation, and a comparison instituted between them and sections from an epithelial cancer of the lip, has not enabled me to observe any difference in the structure of the “nests” in the two growths; and the chief difference, so far as I could determine, was the absence of the “cylinders” so frequently found in epithelioma.

ART. IV.—*Dysentery—Its Treatment.* By A. M. RAGLAND, M. D., Pilot Point, Texas.

Neimeyer, the great German pathologist, assumes the existence of two forms of dysentery—designating one *catarrhal dysentery*, and treating of it as a sequence or complication of intestinal catarrh. Although the symptoms—pain, discharge of mucus, blood, etc.—closely resemble those characterizing the other form, it is clinically distinct and distinguishable from the *specific type* by the existence, *at the very onset*, of fever of catarrhal form, with intestinal inflammation prior to development

of dysenteric symptoms, by the mode of propagation and non-specificity of the cause.

Our purpose in this paper is to offer some observations on the anti-zymotic or anti-parasitic treatment of the great endemic of tropical and semi-tropical regions, of specific origin, propagated, as many leading observers believe, by a "dysenteric germ."

That the active poison in true specific dysentery is parasitic, which preys upon a certain part of the intestinal tract, is no new theory; it has a number of able supporters. Among the more recent, and, possibly, ablest advocates of the "germ theory," is Neimeyer. He holds* that "Dysentery poison cannot be directly observed as an organic, living substance any more than can the poison inducing other infectious diseases; but the reasons we have often repeated, especially when speaking of typhus, induce us to refer dysentery also to an infection of the body by a certain species of low, vegetable organism, and to speak of a dysentery germ, as we have already spoken of a 'typhus germ' and a 'cholera germ.'"

There is good reason to believe that the disease germs in dysentery may, and, under favorable conditions, do, reproduce themselves in the bodies of patients, as do the germs of typhoid fever in that disease. Again, there are seemingly good reasons to sustain the opinion that the dysenteric discharges are infectious; indeed, it is quite probable that epidemics owe their development, in some measure, to this mode of propagation.

In advocating the view that the active factor of dysentery is a poison, inducing certain uniform lesions of the large bowels, *primarily* affecting no other organs, and no more dependent on malaria as a cause than is typhoid fever, we come in collision with no less authority than Dr. Aitken, the accomplished author of one of the best practical treatises on medicine in our language. He asserts that a most respectable following entertain in common the view that malaria is the common cause of both dysentery and malarial fevers. We quote from 2d American edit., vol. i, p. 558:

"This connection is so intimate that a given number of persons being exposed to the action of paludal miasmata—as, for example, a boat's crew sent ashore in a tropical climate—the

**Practice Medicine*, vol. ii, p. 667.

probabilities are, that of the men returning on board, part will be seized with dysentery, and part with remittent fever.

"Paludal fever and dysentery, moreover, are not only conjoined in locality, but they often co-exist, precede or follow each other in the same individual, so that the fever frequently ends in dysentery, and dysentery in remittent fever.

"This proof of the common nature of these diseases is corroborated by every writer of any celebrity, and more especially by those who have detailed the diseases of our armies. But dysentery also *prevails where there is no other evidence of the presence of malaria*. Nevertheless, the evidence in favor of malaria being the common though probably not the sole cause of dysentery, appears to be much the stronger."

After thus strongly presenting the view of the common origin of dysentery and malarial fevers, we find him asserting the probable infectious nature of the exuviae of dysentery passed by stool. On page 561 he says:

"It does not seem to be as clearly understood as it should that dysentery *is contagious, or, rather, that it is capable of being propagated, from person to person.* ***** *There is, therefore, good reason to believe that the exuviae of dysenteric patients, as passed by stool, may, like those of typhoid fever, propagate the disease.*" (Italics ours.)

We are not aware that at the present day there is an advocate of the infectious character of remittent fever; but it would follow as a corollary from Aitken's view of the common origin of malarial fevers and dysentery, that remittent fever is infectious. That malaria may, and does, often complicate dysentery, is unquestionable; but the view of the common origin of dysentery and remittent fever is so much at variance with observations of leading Southern American physicians as to be utterly untenable. A disease presenting such uniform lesions as dysentery, could not, it seems to us, be the product of a poison that, under seemingly identical conditions, induces an entirely different train of morbid phenomena, and results in lesions of organs not primarily implicated in dysentery.

If we admit that dysentery is of specific origin, and that the cause is either a vegetable or animal poison; in short, if the active poison is organic in structure and capable of reproduction within the body of the patient, and is cast off with the dejections, then logically it follows that a plan of treatment directed

to the destruction and elimination of these organic germs would best further the natural process of cure.

To meet these important indications, it would, first of all, be necessary to exhibit an anti-parasitic to destroy the "dysentery germs"; secondly, quiet the intense irritability of the diseased bowel; and thirdly, aid nature in her work of elimination by stimulating the excretory functions of other organs.

I think we may safely take the position that, in a large majority of cases in the initial stage, dysentery is a *purely local* disease, involving other organs only by secondary implication; in other words, the inflammation is the result of the irritative action of a poison upon the mucous coats of the large bowel. The symptoms, at the onset of the attack, point to a local impingement of the poison; no serious disturbance of the economy results till a variable interval of time elapses. A diarrhœa for some hours or days may be the only sign that a diseased process is advancing; this, sooner or later, is succeeded by characteristic stools, tormina, tenesmus, etc.

Modern investigation shows carbolic acid to be one of the most powerful antiseptic agents known to science; its power to arrest destructive molecular change and fermentative processes is beyond question; its potency as an agent for the destruction of parasitic fungi is also established on unimpeachable evidence. Lister's arduous labors in the building up of his antiseptic system of surgery, deserves recognition, inasmuch as he has directed the attention of the profession to the prominent part played in modern pathology by these low organisms everywhere present. Effort quite recently has been made to discredit the powers ascribed to carbolic acid; but the positive proof so far outweighs any negative evidence adduced, that little room remains to doubt the establishment of its peculiar powers as a destroyer of "disease germs."

Holding the view that dysentery is caused by a parasitic poison impinging locally upon the mucous surface of the large bowel, and that carbolic acid, internally administered, is capable of destroying the dysenteric germ, I have devised the following formula:

R. Acid. carbol. (delq.)	gtt. x
Syr. rhei, aromat.....	3j
Ol. limonis	—
Ol. sassaf.....	aa gttss. v.

Mix. Sig. One teaspoonful every two or three hours till relief is obtained.

If tormina and tenesmus are distressing, add laudanum, gtt. x, to each dose until pain is quieted. If the attack is very violent, it will be well to give an enema of starch water or other emolient, adding thereto laudanum or aqueous extract of opium, and carbolic acid, gtt. ij-ijj. I have had no cases, however, that did not get immediate relief by the use of the above remedy given by the mouth.

I introduce from my note-book a few cases illustrating the influence exerted by the remedy:

Case I.—Mrs. L., a widow, age about 22. Has been suffering two or three days with diarrhœa, to which she paid little attention till bloody mucus discharges, accompanied by severe pain, supervened. She then essayed to get relief by the use of salts and laudanum. Failing to get other than temporary relief, she applied to me on the night of the 17th September, 1872. I found her in great pain, with frequent calls to stool; tenderness along the course of colon and rectum; has considerable fever. I prescribed the carbolic acid prescription just named. Also, while fever continues:

R. Syr. rhei, aromat..... \bar{z} ij
Tincture valerian..... \bar{z} j
Piperina grs. v
Sodæ bicarb..... grs. x

M. Rub syrup rhubarb with peperina before adding tincture valerian. S. One teaspoonful every three hours. Also, take quinine, grs. iij, every three hours. The two latter recipes were added to meet malarial complications thought to be present in the case. The patient recovered without further treatment.

Case II.—Charles B. (colored), aged 54, was attacked at night on September 23, 1872, with violent dysentery. He was up to stool every few minutes; the discharges were only mucus and blood; there was great tenesmus at each effort—the griping being so severe that he finds no rest. To the carbolic acid mixture above, add tinct. capsici \bar{z} ij, tinct. opii \bar{z} j. M. Sig. One teaspoonful every three hours. Also,

R. Podophyllin grs. iv
Rhei pulv..... grs. xvj

M. Make viij pills. S. One every six hours. The relief was almost immediate.

Sept. 24. Patient came to my office (4 miles) to report this evening. I advised him to continue medicine at longer intervals for a day or two. Cured.

Case III.—Mrs. G. W., age 23. Scrofulous cachexia well marked. Taken ill September 26, 1872. Had diarrhoea several days before dysenteric symptoms appeared, Oct. 1. Saw her first time in evening; she has frequent bloody discharges, with pain, etc. Of the carbolic acid mixture, take one teaspoonful every three hours. Also, a teaspoonful fever syrup every three hours.

Oct. 2. Morning. Has no fever, but continues to have frequent bloody discharges. Add to the mixture sulphate of zinc, capsicum $\overline{aa}3ij$, tinct. opii, $3j$; teaspoonful every three hours, as before. Also, take a mild cathartic to move the upper bowel.

Oct. 3. Is much better; had but two evacuations since yesterday. Continue the diarrhoea mixture only. Cured.

Case IV.—Oct. 2, 1872. Emma W., aged 3 years; has frequent discharges streaked with blood; no fever. R. Diarrhoea mixture in dose proportioned to age every three hours.

Oct. 3. Much better; continue treatment. Cured.

Case V.—March 18th, 1873. Miss J. H., aged 17; has dysentery; has had diarrhoea for several days. Now (March 20) has bloody discharges as often as every hour. Tormina and tenesmus severe; has fever; anorexia. Of the carbolic acid mixture, take a teaspoonful every three hours. Fever syrup every three hours till fever subsides.

March 21. Bowels moved once or twice during night. Continue treatment.

At the evening visit, I found the patient had felt so well this morning that, contrary to advice, she had been on her feet most of the day, and, consequently, did not feel so well. Bowels moved several times during the day; some blood and mucus; tongue coated. Continue treatment, adding

R. Calomel.....grs. iv

Pulv. Doveri.....grs. x

M. S. Take at bed time, and remain quietly in bed; has nausea and fever.

March 23. Discharged cured.

The prompt and early relief in the above cases would seem to indicate great mildness of type of the dysentery, when, in reality, some of the cases were violent, and, under ordinary treatment, would have run a course of 8 or 10 days. Other cases treated on the usual plan—opium, calomel, ipecac, etc.—ran from a week to ten days. I have adopted this method for four years, with a single fatal case.

ART. V.—*Solid Tumor of Ovary—Ovariectomy Determined Upon—Operation Abandoned on Account of Extensive Adhesions—Partial Excision of the Tumor—Fatal Result.* By SAMUEL C. GLEAVES, M. D., Ex-President Medical Society of Virginia, Wytheville, Va., and JAMES B. JORDAN, M. D., Newbern, Va.

Knowing the unreliability of the mortality returns of all capital operations, we have determined to present the report of an attempt at ovariectomy, with the purpose both to avoid keeping from the profession a case which happened to prove fatal, and also to show how varying are the physical signs of ovarian tumors, and consequently how unsettled must be the basis upon which we rest our diagnosis in similar cases.

The case is that of Miss R. H——, of Grayson county, Va., naturally of a vigorous constitution; age about 45; single; a pauper; has never given birth to a child. About seven or eight years ago, she noticed a tumor developing in her left iliac region, then about the size of a goose egg. This tumor slowly enlarged until about three years ago, when she was sent to the poor-house, where she was advised to submit to the operation of ovariectomy, which then offered very favorable prospects as to a successful issue. The tumor at that time was movable, apparently changeable as to size—sometimes enlarging for a few days, and then, suddenly reducing, from the operation of a hydragogue cathartic—though in reality, there was a gradual increase in its dimensions. On changing her position suddenly, she could perceive in the left iliac region the movement of a solid body as if suspended by a slender pedicle. Although the operation then promised well, she declined to be operated upon, on account of her spiritual relations, which she did not consider such as to warrant the risk that she would have to undergo. The operation being somewhat insisted upon by the physicians in charge of the alms-house, and thinking that they had the power to operate, without “law or license,” she left the institution. From that date until the present time the tumor continued to enlarge. During the last four or five years she has suffered considerably from leucorrhœa, though menstruation has been normal as to amount, character, and regularity. For the last year she has been a victim of the most violent dysmenorrhœa, owing to the rapid development of the tumor, which began to offer a great mechanical impediment to the discharge of the menstrual fluid. She was also subject to repeated attacks of partial peritonitis, so common in these cases.

Gastro-intestinal derangements were common throughout the whole history of the case.

We first saw her in January, 1876. She was rather cachectic and presented the appearance of a woman at full term of uterogestation. So prostrated had she become by the great weight of the tumor, and by complicating diseases, that death was the goal she longed to reach, and life a boon that she had ceased to prize. Some of these complications were very remarkable; in fact, we do not remember to have read of a case so remarkable in all its details. The complications referred to were exophthalmic goitre, chronic bronchitis, and cirrhosis of the liver.

Our notion in regard to the ætiology of the first named complication is, that it was produced in the same way that a temporary exophthalmic goitre is sometimes produced in pregnant women, viz: by pressure of the gravid uterus upon the abdominal aorta, thus diminishing the amount of blood sent to the lower extremities, and augmenting the amount sent through the carotid or axillary arteries to the upper part of the trunk, the brain and the upper extremities. The heart to overcome the resistance offered, redoubled its energies, and hypertrophy of the left cardiac ventricle was the result. The resistance offered by the rapidly enlarging tumor, which increased out of all proportion to the cardiac hypertrophy, soon began to offer an obstacle to the free passage of blood through the pulmonary veins, produced hyperæmia of the lungs with consequent congestion, and finally, chronic inflammation of the bronchial tubes. The hypertrophy of the thyroid body, was perhaps due to local determination of blood to the structures of the gland, and the tissues in its vicinity, by the four large arteries which supply the gland, and which spring directly from the subclavian and external carotid arteries, and sometimes by a branch from the arteria innominata. Could not that lustrous appearance of the eyes, also, and the great prominence of the eyeballs, be due to change in nutrition by a dilated condition of the vessels supplying the eyeball and the orbits? Various causes have been assigned to explain the exophthalmus, but nothing settled, I believe, has been arrived at. Stokes thinks that it is due to dropsy of the eyeball, but does not offer proof to support his view. Romberg found elongation and dilatation of the ophthalmic artery. Trousseau records a case in which enormous hypertrophy of the cellular and adipose tissues inside the orbit pushed the eye out of its socket.

The cirrhosis, we are satisfied, is the secondary phenomenon, the result of the derangement of the heart and due to mechanical causes. Though this cirrhosis was not far advanced, and the nature of the disease was somewhat obscure, still we are satisfied of its existence from the dry feel and parchment-like hue of the skin, from the ascites and œdema of the lower extremities, and from the appearance of the abdomen, which was traversed in various directions by tortuous venous trunks, testifying to an obstruction to the return of the blood through the deep veins. The urine was scanty and highly colored, though it contained no albumen.

At the time we paid the patient our first visit, there was considerable hyperæsthesia of the whole surface of the abdomen. Percussion elicited no tympanitic resonance over the umbilical region, but rather a dead, semifluctuating [?] sound. She was suffering greatly from dysuria and constipation. The introduction of the catheter was difficult; indeed, it required the exposure of the parts. The bladder contained but little urine. Take 30 minims of spirits nitrous ether every four or five hours; also a large dose of opium at bedtime; to be followed next morning by the following powder:

R. Hydrargyri chlorid. mit..... gr. iij.
 Pulvis rhei.....gr. v.
 Extractum colocynth compos.....gr. ij.

M. To be taken in syrup.

Returned next evening, found her resting comfortably; dysuria had to a great extent disappeared, and she now passed her urine freely. Slept well during the night; had a free evacuation from the bowels next day, and reported herself feeling much better. We now, as the sensitiveness of the parts had somewhat subsided, determined to examine the parts more in detail. The tumor had become so impacted in the pelvic cavity, and had so drawn up the orifice of the urethra behind and above the pubic symphysis, that it was reached with the greatest difficulty. The uterus occupied a high position in the pelvic cavity. It, with the bladder, was forced out of its position by the tumor behind the symphysis. The cervix was flattened antero-posteriorly, and its lips somewhat thickened and slightly everted. Douglas' *cul-de-sac* was hard and unyielding, presenting not the slightest fluctuation. In fact, the pelvic cavity was so completely occupied by the growth that it was impossible to ascertain the condition and relation of its various organs. The rectum was so infringed upon that purges had to be constantly resorted to in order to relieve

it of its contents. Violent cramps in the lower extremities were common, from pressure upon the sacral plexus of nerves.

Though not thoroughly satisfied as to the nature of the tumor, we were forced to operate, both on account of the impending nature of the symptoms, and on account of the earnest petitions of the patient for the best aid that could be offered by surgical art. Having clearly laid the case before her, as to the advantages and disadvantages, she seemed anxious that the operation should be performed, and entertained high hope of recovery.

February 11th, 1876, was appointed for the operation, which was to take place at the poor-house. Drs. Atkins, Dickinson, and Thomas, of Independence, were invited to witness the operation. All preparations having been made, the rectum and bladder were evacuated—the former by an enema and the latter by a catheter; the patient was cautiously brought under the influence of chloroform, which occupied about fifteen minutes. An incision was made, extending from an inch below the umbilicus, to within two inches of the pubis, corresponding as nearly as possible with the *linea alba*. The dissections being cautiously continued down to the peritoneum, this membrane was caught by dressing forceps, and slit upon a director to the extent of the external wound. There escaped from the peritoneal sack, about a pint of transparent albuminous fluid. The hæmorrhage, which was considerable, being checked by persulphate of iron, prior to the slitting of the peritoneum, we passed in our hand through the rent in the peritoneum, to ascertain the existence or non-existence of adhesions. To our utter dissatisfaction, we found that not only was the tumor solid, but that the adhesion of the peritoneum had taken place to the fullest extent on both sides, forming a complete pouch, binding the tumor securely to the abdominal walls, bladder and uterus. Being satisfied that an attempt to break up the adhesions would prove fatal, before we could accomplish the operation, we now only had two recourses, viz: either to close the wound, or to excise a portion of the tumor. Satisfied that such an extensive incision as we had made had already hazarded the patient's life, and being confident that dissolution was but a few days distant if the growth remained untouched, we came to the conclusion that her chances would not be materially lessened by performing a partial excision—which latter operation we performed by removing a triangular piece, the base of which was limited by the adhesions of the peritoneum, and the weight of which was about two pounds. The tumor was exceedingly vascular—some of the arteries which nourished it, being almost as large as the radial at the wrist. These were secured by ligature immediately after division. The tumor when

incised was found to be very hard and resisting, and *creaked*, as it were, under the knife. The cut surfaces were somewhat concave, though not to any marked degree. The tumor appeared evenly tough and resistant in all parts, and seemed to be fused into the abdominal parietes.

Before we finished the operation (which occupied about three-quarters of an hour), the chloroform, which was reapplied several times during the operation, had to be discontinued on account of the supervention of dangerous symptoms. These symptoms were irregular gasping respirations, feeble pulse, and death-like pallor. Ether was substituted for the chloroform when it could be tolerated no longer, and seemed to be borne much better.

All hæmorrhage having been checked, the lips of the wound were brought together and the patient gradually returned to consciousness. Although she appeared perfectly rational after the operation, and seemed to be highly elated at the idea of having a part of the tumor removed from her person; still, the irregular sighing respiration, the quick, wiry and vibratory pulse, and the cold, clammy perspiration which broke out upon the surface of the body, to which was added a wild and glassy appearance of the sclerotic, photographing upon the globe of the eyes the yielding elements of vitality—all conjointly prognosticated a fatal issue—which took place from shock about two hours after the operation. Drs. Atkins and Dickinson remained until her death. We were unfortunately compelled to leave on account of other patients.

The next day a post-mortem examination was made by the above named gentlemen, assisted by Dr. Reid, of Independence. They removed the balance of the tumor, which weighed about ten pounds. This mass, with the two pounds we removed during the operation, made the total weight of the tumor twelve pounds. The particulars of the post-mortem we have never been able to learn.

We present this case, with the hope, not of offering anything new, but to give a fair and impartial history of such cases, and to show what an enormous size this particular tumor attained, and how slowly it developed.

Much Interesting Matter that we had prepared for this department is crowded out by the lengthy report we give of the International Medical Congress.

Clinical Reports.

Stricture of the Rectum—Colotomy—Recovery. By HENRY T. BAHNSEN, M. D., Salem, N. C.

Mrs. S., æt. 35, had, for more than 20 years, experienced pain in the lower bowel, and difficulty in voiding fæces. She had been treated by her family physician for hæmorrhoids, without examination. In September, 1875, I examined, and found a firm stricture, with great thickening of the walls of the rectum, extending upwards for about four inches. Under anæsthesia, I gradually dilated the stricture, until three fingers could be passed into the bowel. The patient had been much exhausted and emaciated by her protracted sufferings before the operation, but she experienced decided relief for some weeks thereafter; she recovered her appetite and strength, and was able to dispense with opiates, to the use of which she had become habituated. Gradually, however, the stricture returned, as she could not be induced to use the bougie to keep up dilatation. In November, the operation was repeated, but again the stricture returned. I now proposed colotomy, but the patient demurred. Her condition, even at this time, would have been considered desperate. Her suffering was constant, in spite of enormous doses of opium (grs. xv to xx was the ordinary dose, and six or more such doses were frequently taken at intervals of an hour). The abdomen was much swollen, but she was much emaciated. Her features were pinched, cool and damp; color dusky, eyes glassy and retracted—a *tout ensemble* frightful to behold. Appetite she had none, and most of her food was regurgitated a short time after it was swallowed.

She lingered on in this desperate state for four months—the stricture gradually tightening, until only a No. 6 rubber catheter could be passed. A minute quantity of fæcal matter would pass into the open end of this, and this constituted her only means of relief. Throughout the whole month of March her death was daily expected, but death not coming in answer to her prayers, I was again called in. This time she begged for the operation.

For a month she had literally lived upon opium ; but even that was no longer retained by the stomach.

On the day of operation (April 4th, 1876), she was in a state of apparent collapse. With the exception of the enormously distended abdomen, she was nothing but skin and bones. The extremities and nose were cold ; pulse too feeble to count ; heart beating 140, with about 40 respirations to the minute. I doubted whether she would survive the operation. To our agreeable surprise, the inhalation of ether brought pulse and respiration nearly to normal rates, and she had rallied completely by the time I had finished. I was assisted by my friend, Dr. Preston Roan, of Winston, N. C. The incision was made in the left lumbar region, as directed in the various surgical works. There was almost no superficial adipose tissue, and the abdominal muscles were so pale and flabby that they could only with difficulty be recognized. The fatty tissue beneath the muscles was also very scant, and I looked in vain for the green intestine, which, in the books, becomes prominent when this tissue is divided. It was not green, but of a grayish, white appearance ; and, although tightly stretched, did not project from the bottom of the wound. An exploring needle soon satisfied me as to its character. It would have taken a day or two to evacuate its contents through a canula, as recommended by the books.

I therefore connected the intestine by a double row of silver sutures to the edges of the wound in such a way that I could open it between the rows of stitches. This plan obviated any danger of fæcal extravasation. The incision into the bowel was about an inch in length, and the fæces, of a mushy consistence, boiled out of it, as if from a spring. In the two hours we remained with the patient, between two and three gallons passed out, and in the next twelve hours fully as much more. It was of natural odor and appearance.

Within an hour after the operation, Mrs. S. begged for something to eat, and in the next day or two, a ravenous, uncontrollable appetite was developed. This I was obliged to indulge, and contented myself by guarding every exhibition of food with a dose of lactopeptine and bismuth. A linen rag soaked in laudanum or spirits of camphor (the best dressing I have ever used for wounds of all sorts) gave perfect ease to the wound,

and, with frequent washing, prevented inflammation. Convalescence progressed rapidly, although complicated a few weeks after the operation by a left femoral phlebitis, with consequent œdema of the limb.

The patient has now been going about, visiting neighbors, &c., for more than two months. No attempt to dilate the stricture, which, from its history and appearance, would seem to be benign, has as yet been made. A suspicious tumor in the umbilical region gives me some uneasiness; and, as my patient is satisfied with her condition, I deem it advisable to abstain from further interference. There is no discharge from the anus, either fæcal or bloody, nor is there pain, except in the tumor above mentioned.

Prof. Gross denounces this operation. To his objections I can only reply that nothing I have ever done has given me more satisfaction than, even in this way, to have relieved the agonizing sufferings of my unfortunate patient. She experiences very little inconvenience from the unnatural opening. A thick pad prevents the soiling of her clothes, and she is always able to tell when an evacuation is taking place in time to retire from company.

From a retention of such size and duration of fæcal matter, one might naturally have anticipated decomposition, fæcal absorption, enteritis, or, at least, scybalous masses and concretions. Nothing of this sort was found. Digestion soon became perfect; and instead of a prolapse of the bowel, there was so strong a retraction, that all the stitches tore out by the third day.

The feature to me most remarkable was the absence of stercoraceous vomiting. Five or six gallons of fæces could not well accumulate in the large bowel alone. I have no doubt that the small intestine was literally packed, throughout the greater portion of its extent. Its absolute fulness caused the regurgitation of whatever was taken into the stomach; and yet, although vomiting was almost constant for weeks, and even months, it was never stercoraceous.

A Case of Biliary Calculus. By W. B. CONWAY, M. D., Physician to Virginia Agricultural and Mechanical College, Blacksburg, Va.

In April, 1871, I was called to see Mrs. L——, married, no children, and aged about 36. My diagnosis was "biliary calculus;" she had had frequent attacks before as I learned, occurring about every two or three months, and had received only temporary relief. On examination, I found the usual symptoms accompanying this disease;—violent pain near the epigastrium, rather to the right side, and occasionally shooting through to the spinal column. The pain was not very acute, but dull and rather paroxysmal, lasting from one to twelve hours; skin yellow, a small and feeble pulse, hurried respiration, feeling of suffocation, and constant nausea and vomiting. I made use of the usual remedies, such as chloroform, opiates, &c., and when the stomach would no longer retain them, I resorted to the hypodermic use of morphia sulphas. I watched carefully in each alvine discharge for sometime after the pain ceased, for a gallstone, and found none; but from the general symptoms and the instantaneous relief, I was satisfied that I was treating a case of biliary calculus.

I was called on repeatedly during 1871 and 1872, thus witnessing the most excruciating suffering to which the human flesh is heir. During that time I resorted to the use of solvents of various kinds, alkaline medicines, mercurials, turpentine, the acids, &c., but without any appreciable results.

About the latter part of 1872, I was with her in the severest attack I had witnessed, and as soon as the pain was relieved, I gave a small dose of castor oil, after which I discovered a gallstone about the size of a cherry, light brown color, round and regular in its outline, very hard, and weighing 33 grains. Its composition was chiefly phosphate and carbonate of lime. I then concluded to make use of chloral hydrate as a solvent, and gave minute doses, from a quarter to half grain *ter die*, at intervals since her last attack; she has never had another attack and is now enjoying excellent health.

I have taken the liberty of reporting this case, hoping it may be of interest to some of your readers, or perhaps to some statistician.

Correspondence.

Quinia in Cholera Infantum and Malaria in Pneumonia.

Mr. Editor: Viewed in the light of a long experience, and practice in a highly malarious district, the doctrine of the miasmatic origin of cholera infantum coincides exactly with my opinion; and I am happy to be supported in this belief by the judgment of so accurate an observer, and so close a student of the general subject of malaria, as Prof. Otis F. Manson, M. D., of your city, is known to be.

The treatment indicated by Prof. Manson, if well timed, will go far, in my opinion, to lessen the fearful mortality of the most interesting class of patients who are the sole victims of this disease. An early quininism will render most cases amenable to other treatment, and will cut the disease short in many instances that, without it, would soon become irremediable. The difficulty of introducing the remedy (quinine) in sufficient quantity in these cases, on account of the extreme irritability of the stomach and bowels, I have often obviated by applying it by way of inunction to the groins, armpits, etc., of the little patient, without resorting to its hypodermic use, which, in extreme cases, I do not regard as admissible on account of its being almost sure to give rise to painful and troublesome sores and abscesses.

While I am writing, I may be allowed to return my thanks also to Prof. Manson for his other papers on the (to us) all absorbing subject of malaria. I refer now, however, especially to his papers on malarial pneumonia.

Many years ago, during a damp, warm spell of weather in winter, I was in the midst of a fearful epidemic of what appeared to be a curious form of pneumonia—though it lacked some of the distinctive signs of that disease as I had learned them. It was treated, however, in our blindness, as ordinary pneumonia, with the result of rapid death of the first seven cases. Discouraged and disgusted, I returned home one day from my daily round, sick and tired of physic. On casting my eye over the table of contents of a medical journal, I found an article from Prof. Manson, on *Malarial Pneumonia*. While reading the article,

instantly the truth flashed upon me; I knew then what I had to contend with in my cases, but I had to lament the loss of the golden opportunity that I had let slip to save the lives of "the seven" who were buried. I at once returned to the field of my late disasters, armed with a weapon that I felt sure would do valiant service. Beginning at midnight (a favorite time with me to commence the use of quinia in all cases), I administered to each adult patient 3ij in doses of gr. x, every two hours, with the result of placing every case in a salvable condition—having nothing of the disease left but slight pulmonary irritation, which was generally removed by a light blister, and sometimes by a few small doses of calomel and Dover's powder. I have never lost a case of this peculiar disease since I have adopted the treatment indicated; although we have many cases of it in our section—especially on the prairie plantations and elsewhere, during certain kinds of weather in the winter time.

Malarial (or as I prefer to call it, congestive) pneumonia—if pneumonia it can be called at all—is with us, when illy understood and improperly treated, one of the gravest and most fatal forms of malarial poisoning; but with timely quinia treatment, it is as surely cured as an ordinary intermittent. Among all the uncertainties and speculations in medicine, this is one of the sure facts, for my first knowledge of which I am indebted to Prof. Manson.

Yours respectfully,

E. H. PRITCHETT, M. D.

Hayneville, Ala., August 11, 1876.

Medical Report from Surry County, Va.

Dear Doctor:—It is a duty incumbent upon the medical profession of this State, particularly to support and maintain the *Virginia Medical Monthly*. What a vast amount of interesting and valuable information has been lost to medical literature, from the fact that, those under whose observation important cases occurred, have not taken the time and trouble to report to some medical journal! I have taken these thoughts home to myself, and will undertake to give a brief outline of what has transpired in my practice during the summer months.

As fever holds the most important place in either speaking or writing of diseases, it will be first noticed. Up to the present time, *bilious fever* has prevailed to a considerable extent; the grade of fever has been inflammatory, but not sufficiently high to require general blood-letting. As an exception to this statement, I have lately seen three families, distant, half a mile apart, among whom this fever assumed a typhous grade. Now the question very naturally arises, how to account for the fever assuming this low grade? After some inquiry and investigation into the subject, in order to satisfy my own mind, I concluded there were but two visible causes so far as I was able to ascertain. The first was, the bad condition of the well water; secondly, there were too many living in the same room. But during the last five years (my time of service here), there has been an effort made every year, as it were, on the part of the typhoid fever to locate in this beautiful section of country; I am happy to say, however, as yet, it has made but little progress.

By way of expressing an opinion on an important medical subject, without the inclination of discussing it, I will say that, notwithstanding, it has fallen to my lot to live for 22 years in what is called the malarious district of this State, and although I have seen and attended to a large number of patients, whose diseases were said to be caused by this subtle poison, called *malaria*, I must confess, that I have but little faith in the assumption of some, that it causes one-half the diseases for which it has credit. The statement does not stand the test of practical experience and observation. Considering the hot weather, our section has been comparatively free from that disease to which cities are so pregnant—cholera infantum.

There is one complaint, however, to which I call attention, as it is quite common here. At some period during the first month of infantile life, the little creatures are taken with what the old ladies call the "*stretches*." This name reveals the most prominent symptom in the case. The infant appears to have chills but does not; for there is seldom any fever, and the course of the complaint is slow. I attribute the nervous symptoms to imperfect performance of some function of the liver, which, unless remedied by proper treatment, is apt to cause convulsions, and

terminate fatally. For such cases, the following prescription succeeds well:

R. Blue mass..... gr. ij.
 Dover's powder..... gr. j.
 Sulph. quinine..... gr. j.
 Prepared chalk..... gr. ij.

Mix, and divide into eight powders. Give one every four hours, *pro re nata*. In some cases, the disease yields readily to this treatment; in others, it is more obstinate and returns from time to time; in these latter cases, give mercury and chalk every other night, until the liver acts freely.

In the case of a gentleman, aged 68, the disease was diagnosed as *cancer of the stomach*. The symptoms were remarkably mild and obscure until vomiting set in. The vomited matter was in large quantity, was black and looked like soot and water. He had eaten cherries at different times. As he would throw them up, he would be able to recognize the kind of cherry, and at what time he had eaten them, even as far back as three weeks.

R. W. F'ANSON, M. D.

Bacon's Castle, Surry Co., Va., August, 1876.

Original Translations.

From the German and French. By WM. C. DABNEY, M. D.,
 Charlottesville, Va.

Hot Water Injections in Uterine Hæmorrhages.—Von Dr Windelband. (*Allg. Wein. Med. Zeitung*, July 11, 1876.)—For two years Dr. W. has been in the habit of using injections of hot water in all varieties of uterine hæmorrhage, and of all grades of severity. He does not state the number of cases in which he has practised this method, but merely says it is very considerable. The conclusion at which he arrives is that in this procedure we have a safe and invaluable remedy for all forms of uterine hæmorrhage; and, furthermore, that it is more rapid in its action than cold and astringents. Only once in the course of two years has he had occasion to use a tampon, and in this case the hæmorrhage occurred at night, and was so profuse that he had not time to procure a syringe.

He thinks, furthermore, that there are quite a number of af-

fections of the female sexual organs besides hæmorrhages in which hot water injections would be highly serviceable—such as enlargement of the uterus, the various forms of displacements and relaxation of the natural supports of this organ. [The use of hot water in various uterine affections, especially chronic congestions, has been practised in this country for some years past, and was, we believe, originally proposed by Dr. Emmet.—W. C. D.] Dr. W's mode of using the injections is to place the patient on the back, and then pass the water into the vagina by means of an irrigator [giving a constant stream] with considerable force. He advises that the temperature at the commencement be 38°C. [100.4F.]; but in some cases he has raised it to 41°C. [105.8F.] without producing any ill effects. He says that the sensitiveness of the sexual organs to heat is very much lessened.

Besides the rapidity and certainty of action which is claimed for this method of treatment, it produces no chilling or unpleasant feelings, as cold always does; indeed, the application of cold is, he thinks, a fruitful source of trouble when it is necessary to use it with women in childbed. The hot water injections are followed by no reaction, and are very soothing and agreeable to sensitive patients.

Infantile Paralysis.—Vizioli (*Allg. Wein. Med. Zeitung*, July 18, 1876), whose interesting article appeared originally in an Italian medical journal, comes to the following conclusions:

1. Infantile paralysis undoubtedly has its seat in the spinal cord. In the commencement it consists in an irritative process, to which follows a genuine pathological condition, which consists in the atrophy, shrinking and disappearance of the large cells in the anterior horns [of gray matter].

2. The first stage, that of irritation, is of short duration, and marked by very few symptoms of disease; the second stage of atrophy and degeneration lasts for months and years—may become stationary and so remain for a life time; and the symptoms which accompany it are numberless and various. Of these, the most important, on account of their constancy and extent, are atrophy and degeneration of the muscles, with their pathological consequences.

3. Of these latter, the most important are the contractions, which are caused chiefly by the loss of balance between the muscles—some being paralyzed, while their antagonists have remained sound or regained their normal condition, and thus are in a state of permanent contraction.

4. Infantile paralysis exhibits a great variety of symptoms so that the affection simulates the various forms of paralysis

which generally occur first in children—just as we have various forms of paralysis in adults from apoplexy.

5. The so-called “temporary paralysis” of Kennedy is not a distinct affection, but only a mild form of infantile paralysis, in which atrophy and fatty degeneration of muscles does not occur. Between the two extreme forms an intermediate one occurs of moderate intensity, and having complete symptoms.

6. The prognosis depends on the severity of the disease; some cases get well without treatment; some are entirely incurable; while an intermediate class of moderate intensity are more or less amenable to treatment.

7. In applying remedies, the pathology of the affection is to be borne in mind. In the beginning they should be directed against the irritative process, which progresses rapidly in the spinal cord. Therefore, under all circumstances, discutients (*Zertheilende*), antiphlogistic and such means should be used, which have the power of lessening the calibre of the vessels and diminishing the flow of blood, since it is from this that the degenerative process takes its origin. The constant electric current, with the anode on the vertebral column and the cathode on the affected limb, exerts the greatest influence on the exudation and the flow of blood. The treatment of the second stage (that of degeneration) must be undertaken very early for any hope of success to be entertained.

By exploration with the electric current, the physician can determine whether an active and excitant treatment is to be pursued. If the induction current causes no nervo-muscular reaction, it is evident that the trophic action of the spinal cord is lost, and that atrophy and fatty degeneration of the muscles has commenced. At this stage, the preparations of strychnia, the use of thermal baths, the cold douche, electricity, active and passive movements, nourishing food, &c., are indicated. Not much hope should be entertained of complete recovery; at all events, the treatment has to be kept up for months, and even years.

Two Cases of Pleurisy—Remarkable Effects of Jaborandi. Dr. Michou (*La Tribune Médical*, August 6, 1876) states that while the cases of pleuritic effusion in which jaborandi has proved serviceable are already very numerous, he thinks the following two observations well worthy of publication:

M. I. Ludovic, aged 19, a student, had, in spite of a naturally feeble constitution, studied very hard in order to prepare himself for his examinations. In the latter part of March, he was suddenly attacked with an acute pleurisy of the left side. The physician who was called in treated the disease by the application

of a large blister, which produced a violent cystitis. Nevertheless, the patient was soon convalescent, and on the 5th or 6th of April he went with his parents to Laudervalle to recruit. He progressed favorably till the morning of the 10th, when he was suddenly taken with a violent stitch in the left hypochondrium, dry and frequent cough, a feeling of suffocation, and fever, accompanied by chills. Dr. Carreau was called in, and diagnosed an extensive pleurisy. The skin was hot and dry; the pulse 120 per minute. An application of two wet and two dry cups relieved very considerably the stitch in the side.

We saw the patient together at 9 o'clock on the morning of the 12th. Pain in the side was only felt when the patient coughed, which he did very frequently. There was complete dullness over the whole of the left side of the thorax, from the axillary cross and the shoulder blade to the base of the lung; there was no thoracic expansion, but a total absence of vesicular murmur; the tremulous voice (egophony) could be heard under the shoulder blade; no sound at the base, owing to the thickness of the layer of intra-pleural liquid. The pulse was 116, feeble and irregular; skin dry; tongue coated; the urine scarce, red and cloudy. His general condition was very bad. In the presence of an affection coming on so rapidly and with so much violence in a subject enfeebled by overwork and a recent pleurisy, it was not possible to use any active treatment. We were afraid to use blisters for fear of setting up cystitis again, which, in the patient's condition, would have been a serious complication. Still, it was necessary to act quickly, as the effusion was rapidly increasing. The ordinary diuretics offered only a feeble resource, as they are slow and uncertain. We decided to administer jaborandi, and to feed the patient with milk and soup. At 5.30 o'clock on the morning of the 13th, all the symptoms were greatly aggravated, and a small blister was applied. The jaborandi was now received, and about 9 o'clock the patient took an infusion of 5 grammes (75 grains) in a glass of hot water. In five minutes' time he commenced to expectorate, and five minutes later the salivation was so abundant as to cause fatigue. There was a continual flow of saliva till about three o'clock in the evening. Unfortunately, the liquid was received on towels, and hence the quantity could not be ascertained. At the same time, the perspiratory function was re-established, and his clothes were completely soaked. At 6 o'clock in the evening, the effusion was notably diminished; the respiratory murmur could be heard under the shoulder blade, and egophony only existed at the lower part. On the next morning, there was no fever; the effusion had almost entirely disappeared, and he

progressed favorably afterwards, and by May 15th was stronger and better than before the attack.

Dr. M's second case was a man, aged about 40, who had been sick about five weeks. The disease had come on with pain in the right side, dry cough and fever. When seen first by Dr. M. (on July 14th, 1875), he was very feeble, pale and emaciated. His pulse was 120, weak and irregular; skin moderately warm, and there was great difficulty of breathing when he walked. He slept little, and was greatly disturbed by dreams. There was complete dullness over the whole of the right side of the chest, except at the apex; no respiratory murmur. The left side was normal. There was a frequent, dry, painful cough. The prognosis was bad. The treatment recommended consisted in the administration of diuretic drinks, liquid nourishment and hydragogue cathartics. On the 17th of July, his pulse was 116, and he had been completely purged; but the condition of the lung was about the same. Five grammes of jaborandi leaves were given in infusion on the 19th. In five minutes he commenced to expectorate, and for more than three hours the liquid ran freely from his mouth. Unfortunately, however, it was received in towels, and hence the quantity could not be determined. Profuse perspiration also occurred, and the patient's clothes had to be twice changed. He was somewhat weakened by the drain on his system, and, indeed, the flow from the skin and mouth had been very considerable. On the evening of the 20th July, his pulse had fallen to 80. Good nourishment, diuretics and beer, of which he was very fond, were directed. On the 22d, the dullness was much less extensive, and his cough not so troublesome. At the end of a month, he was so far restored as to resume his usual occupation, though there was still some trouble about the pleura.

Formation of an Artificial Vagina in a Woman 26 Years of Age, by Electrolysis.—By Dr. Léon Le Fort. (*La Tribune Médicale*, August 20th, 1876.) This woman, when 15 years old, had suffered some troubles, which were supposed to be due to the effort of nature to establish the menstrual flow; but in consequence of the absence of a vagina, the normal discharge was replaced by hæmorrhages of various kinds—from the inside of the thighs, hæmatemesis, bleeding from the nose, &c. She suffered intensely at such times. In 1872, M. Léon Labbé performed ten operations on her, the result of which was the formation of an infundibulum several centimetres in depth. In 1875, another similar operation was performed by M. Anger.

In January, 1876, she passed into the hands of M. Le Fort who employed the following method of treatment: He intro

duced into the infundibulum a cylinder of box-wood, covered near its end with metal, which was connected with the positive pole of a battery of little elements of zinc and copper. The negative pole was connected with a metallic plate, which was covered with wet cloth, and placed on the abdomen. The strength of the current was not great; it was scarcely felt by the patient, and only some very slight sloughing was caused in the tissue in direct contact with the metallic rheopores. The apparatus was placed in position every evening, and kept so all night. Little by little, the piece of wood coated with metal, made its way in the vesico-rectal septum, and on the 26th of February, it had penetrated to the os uteri, for blood passed by the vagina at a menstrual period for the first time. It was accompanied, however, by hæmoptysis; but by the following month, the treatment having, in the meantime, been continued, a sufficiently large canal had been formed, and the menses were normal in every respect. The treatment was carried further, however, in order to give her a vagina sufficiently large for all purposes, which result was accomplished by the 29th of July, when the speculum could be easily introduced. In order to render the opening permanent, she was advised to insert a piece of smooth box-wood occasionally, and let it remain all night.

Deep Injections of Chloroform in the Treatment of Inveterate Sciatica.—By Dr. de Cérenville. (*La Tribune Médicale*, August 20th, 1876.) This method of treatment, originally practised by Drs. Collins and Bartholow, consists in inserting the needle of a hypodermic syringe deeply into the thigh or hip and injecting from thirty to fifty drops of chloroform. Remarkable results have been reported from this treatment. A patient who had suffered constantly and acutely for ten weeks, was permanently relieved by a single injection; while another of three years' duration was cured by a single injection of forty drops. Cérenville confirms these statements as to its great utility; but, as might be expected, says he has had failures.

He mentions two accidents liable to cause trouble. In two cases complete anæsthesia was produced in the limb in which he used the injection. This lasted two days, and then disappeared suddenly. He thinks it possible that the injection in these cases penetrated the sheath of the nerve. Sometimes a painful swelling made its appearance at the point of puncture, which was treated by mercurial inunctions and emolient cataplasms. The amount which he usually injects is fifty drops.

Proceedings of Societies.

INTERNATIONAL MEDICAL CONGRESS.*

First Day.—The Congress convened at noon, Monday, September 4, 1876, in the chapel of the University of Pennsylvania, in Philadelphia. The hall was densely crowded with delegates and visitors. The session was called to order by Dr. S. D. Gross, of Philadelphia, who called on Right Rev. Bishop Wm. B. Stevens, of the Protestant Episcopal Diocese of Pennsylvania, to lead in prayer.

After prayer, Dr. S. D. Gross called Dr. W. S. W. Ruschenberger, U. S. Navy, a Vice President of the Commission, to the chair, and then proceeded to deliver the Address of Welcome. His colleagues had confided to him, as President of the Centennial Medical Commission, the agreeable and honorable duty of opening this Session. In their name as well as his own, and that of the entire medical profession, he welcomed the delegates to the City of Brotherly Love. If the organization is less complete than to some it may seem to be, no blame can be ascribed to the Commission on account of any short-comings. There might possibly have been wiser and more experienced heads at work; but warmer hearts or more conscientious men never were engaged in a noble enterprize. The invitations sent out by the Commission cover every prominent medical society, and every distinguished medical man in the four quarters of the globe. The object was to bring together the benefits of their wisdom, and the results of their experience and scientific investigations. If even a respectable minority of these representative men could have been here, what a glorious spectacle would be presented? Men laying aside for awhile their ordinary pursuits, crossing vast continents and perilous seas, congregating to unite with us in celebrating our first Medical Centennial, in interchanging cordial salutations, in deliberating upon the best means of promoting the holiest and dearest interests of our profession, and in laying their contributions—the accumulation of years of study and observation—upon a common altar for the common good. In its wide range the present Congress is without a parallel! Similar bodies have repeatedly met, but none on so grand a scale or with such a cosmopolitan outlook.

*This report was compiled from the *Philadelphia Inquirer*, *The Times*, *Public Ledger*, *The Press*, *Evening Telegraph*, *The Item*, *The Boston Med. and Surg. Journal*, *Medical Record*, the official pamphlet of *Outlines of Papers, &c., Read before Sections*, *The Medical News and Library*, which latter named journal contains the best report of the *Conclusions of Sections* on the subjects discussed of all the journal reports that have come to hand.

In organizing the Congress, the Commission might have been guilty of undue partiality toward their own country; but if this was so it was because of an irresistible desire to show the world what the century since the establishment of a free and sovereign government of the people had accomplished for scientific medicine. Time was, when we were wholly dependent upon our European brethren, especially the English, whose language, practice and habits we made our own. The poverty of the country in these respects cannot be better illustrated than by the fact that we had no native works on medicine and the collateral sciences until after the commencement of the present century. Many will recall the words of the great English lexicographer who, in 1769, in speaking of the American colonies, exclaimed, "Sir, they are a race of convicts, and ought to be thankful for anything we allow them short of hanging." The Abbe Raynal, writing in the latter part of the last century, declared that America had not yet produced a single man of genius; and the exclamation of a celebrated Scotch reviewer, uttered at a more recent period, "Who reads an American book, who goes to an American play, or who looks at an American picture?" is still fresh in the memory of many. The discourses which will be delivered on the progress of American medicine will serve to show that the profession of the United States is fully abreast with all the other pursuits that adorn the human mind and shed lustre upon the scientific character of the nation. They will serve to show that we have passed the period of medical provincialism, and that we stand upon a lofty platform, to which we need not be ashamed to invite the representative men of the profession of foreign countries.

It has often occurred to him that if these international reunions were more frequent and more largely attended, they would be a vast deal more serviceable in preventing war and international misunderstandings than any arbitrations that could be inaugurated for the settlement of international difficulties. Much of the pleasant feelings at present existing between the United States and Europe is due to the enlarged intercourse which has been going on since the invention of steam navigation, and the consequent interchange of hospitality and courtesy between the two countries.

Dr. Gross, in closing his remarks, announced that the following Committee on Nominations had been named by the Commission, and upon motion, it was confirmed by the Congress: Drs. W. Adams, London; Englested, Copenhagen; Hueter, Prussia; Rudnew, St. Petersburg, Russia; J. A. Grant, Ottawa, Canada; Henry J. Bowditch, Boston; L. A. Dugas, Augusta, Ga.; J. T. Hodgen, St. Louis; Christopher Johnston, Baltimore; Austin

Flint, Sr., New York; W. S. W. Ruschenberger, U. S. Navy; Jos. R. Smith, U. S. Army; Edwin M. Snow, Providence, R. I.

After consultation the Committee presented the following report, which was unanimously adopted:

President—Dr. S. D. Gross, Philadelphia.

Vice Presidents—Drs. Paul F. Eve, Tenn.; Joliffe Tufnell, Dublin; W. L. Atlee, Philadelphia; C. Lange, Copenhagen; J. B. Johnson, St. Louis, T. Seneleden, Vienna; Hunter McGuire, Va.; Johan Hjort, Christiana; T. G. Richardson, New Orleans; Wm. H. Hingston, Montreal; J. P. White, New York; H. Miyake, Japan; N. R. Smith, Baltimore; Rudnew, St. Petersburg; J. M. Toner, D. C.; Hueter, Griefswald; G. L. Collins, Rhode Island; R. F. Hudson, Australia; H. Gibbons, Cal.; P. De Baisieux, Belgium; N. S. Davis, Chicago; Wm. Adams, Esq., London; L. A. Dugas, Ga.; A. R. Simpson, Edinburgh; J. K. Bartlett, Wisconsin.

Honorary Vice Presidents—Surgeon Generals Barnes, U. S. A., and Beale, U. S. N.

Secretary General—Dr. J. Minis Hays, Philadelphia.

Assistant Secretaries—Drs. Wm. B. Atkinson, R. J. Dunglison, R. A. Cleemann, W. W. Keen, R. M. Bertolet.

Section of Medicine—Chairman, Dr. A. Stillé; Vice Chairmen, Drs. R. P. Howard, Canada; and J. J. Woodward, U. S. Army; Secretary, Dr. J. Ewing Mears.

Biology—Chairman, Dr. J. C. Dalton; Vice Chairmen, Drs. A. Flint, Jr., New York, and F. W. Campbell, Canada; Secretary, Dr. J. Tyson.

Surgery—Chairman, Dr. Joseph Lister; Vice Chairmen, Drs. J. A. Grant, Canada, and J. Ashhurst, Jr., Philadelphia; Secretary, Dr. J. H. Packard.

Dermatology and Syphilology—Chairman, Dr. J. C. White; Vice Chairmen, Drs. S. Englested, Copenhagen, and E. Shippen, U. S. Navy; Secretary, Dr. A. Van Harlingen.

Obstetrics—Chairman, Dr. Robt. Barnes, Eng.; Vice Chairmen, Drs. A. Simpson, Edinburgh, and W. H. Byford, Chicago; Secretary, Dr. W. Goodell.

Ophthalmology—Chairman, Dr. R. Brudenell Carter; Vice Chairmen, Drs. Wm. Thompson, Philadelphia, and H. W. Williams, Boston; Secretary, Dr. J. Green.

Otology—Chairman, Dr. L. Turnbull; Vice Chairmen, Drs. A. H. Buck, New York, and C. J. Blake, Boston; Secretary, Dr. C. H. Barnett.

Sanitary Science—Chairman, Dr. Stephen Smith; Vice Chairmen, Drs. J. S. Billings, U. S. Army, and H. B. Baker, Michigan; Secretary, Dr. E. M. Hunt.

Mental Diseases—Chairman, Dr. J. P. Gray; Vice Chairmen, Drs. I. Ray, Philadelphia, and E. Grissom, Raleigh; Secretary, Dr. W. Kempster.

Committee on Publication—Drs. J. Ashhurst, Jr., R. J. Dun-
glison, Wm. Goodell, J. H. Hutchinson, Caspar Wister.

Treasurer—Dr. Caspar Wister, Philadelphia.

While the Committée was in session, Dr. Austin Flint, of New York, delivered an **Address on Medicine**, in which, at great length, he showed the progress made by medicine during the past century. One hundred years ago there was one medical school in Philadelphia and one in New York. The Revolutionary war called out the medical energies of the colonies, but arrested medical teaching for some years. After the war, Franklin interested himself in founding the Philadelphia Medical College, which, in 1791, was merged into the medical department of the University of Pennsylvania, and was modeled after the school of Edinburgh, and that after the Leyden school. All the professors of the Philadelphia school had been educated in Edinburgh. Rush was then the leading American medical mind. He wrote original treatises and edited foreign works.

About 1800, there were 20 medical schools and 2000 students in the United States. Six of the schools were in Philadelphia, New York, and Boston. The remaining 14 provincial colleges developed inquiry among physicians in their neighborhood and incited them to become teachers. There was great jealousy among schools at this time. The first two graduates from Harvard met great opposition, and received their diplomas only through the influence of Dr. John Warren.

At this period there were 20 medical journals. Even now their number is only doubled. Locally they are generally in the interest of some particular school, but they are useful in distributing medical intelligence. In referring to the *American Journal of Medical Sciences*, the speaker asked: Without any disparagement of the numerous able and useful periodicals published during the last half century, may we not with a feeling of pride refer especially to a journal which, with such a history, is now the oldest living representative of medical periodical literature, and which has probably a circulation larger than that of any other in Europe or America?

The profession in America have ever been fraternal. Even the late war did not disturb the strong feeling of friendship between Northern and Southern medical men.

Dr. F. mentioned Cullen as the strongest pathologist at the close of the last century. Following him came Rush, then Good, each having an original system; then Brown, of Edinburgh, the

opponent of Cullen. There was at this time no leading system. In 1801 Valentine Seaman, of New York, began vaccination. In 1817 the Pharmacopœia was projected, and published in 1820. In 1846 anæsthetics were first used in Boston, and afterwards introduced into England and the Continent. In 1829 the first native work on pathological anatomy was published by Horner, and later, Gross's work appeared.

Dr. F. next referred to auscultation, making honorable mention of James Jackson in connection with the discovery of the significance of prolonged expiration; also of Dr. Holmes as having taken the Boylston prize for an essay on auscultation. In the diagnosis of heart diseases American physicians were aided by the works of Hope, André, Stokes, and others; Bowditch and Gerhard also made us familiar with this science.

In the second quarter of the 19th century, Hays' *American Journal of the Medical Sciences* first appeared, promising translations of foreign medical intelligence, and valuable original articles. It has fully kept the promise Dr. F. then made flattering mention of the earnest and prolonged experiments of Beaumont upon St. Martin. Broussais's works, translated by Hays and Griffiths, won many disciples to Broussaisism. This last of the legitimate *isms* has given way to illegitimate '*pathies*. Cook believed congestion of the liver to be the *fons et origo* of all diseases. Alluding to the Kentucky practice of giving huge doses of calomel in affections of the liver, the speaker told a story of a yeoman, who, while plowing his field, came upon a quantity of metallic mercury, and supposed he had struck a mine of wealth. He became quite chop-fallen when told that he had simply plowed up the spot formerly used as the burial-place of patients who had been subjected to mercurial treatment.

Jacob Bigelow, in 1835, struck the key-note of change in treatment in his work on Self-Limiting Diseases. Polypharmacy and heroic measures fell into disrepute. Physicians became more reserved and humbly changed to servants of nature. In 1833 appeared the United States Dispensatory. In 1847 the American Medical Association was inaugurated for the protection of the profession and for the advancement of knowledge. At this time the non-identity of eruptive fevers was accepted as a fact. In 1846 Meredith Clymer was the first to discover and describe relapsing fever. Dickson and Drake announced their belief in the conjoined action of different morbid influences at the same time in the same person. John Ware inaugurated the numerical method in the use of opium. The large use of opium in peritonitis was referred to as the American method of treatment of this disease. Bowditch invented the operation of paracentesis

thoracis, and although we now say aspiration in place of suction, the operation in its origin is American.

Coming down to the last quarter of the century, the speaker alluded to some of the characteristics of progress in medical science in America, the advance in histology and pathology, the use of the microscope (referring here to the brilliant paper on the microscope by Burnett in 1851), the great influence of German medical literature in the direction of pathology, the fondness of Americans for foreign schools, and the unwise prejudice of some persons against this inclination to study in European schools. We should be humble in our relations with the schools of Europe; yet no student from abroad, who has remained the mere satellite of his foreign master, has ever attained distinction.

Reference was then made to the injustice of the non-existence of a copyright law. Republication of French works in translation has become unnecessary because of the general knowledge of the original. Similar knowledge of the German language, it is hoped, will soon be as general.

Our literature has been fairly treated and well received abroad. Our works are practical in character because we are young. The leading characteristic of our medical schools is practicality. The public is practically unprotected by law against practitioners who have no diplomas. Let us try to improve our methods of teaching, but avoid wholesale condemnation of what has been done. Of our code of ethics, Dr. F. said, it has remained unaltered during the past twenty-five years. This reflects honor on the profession. In no other country is the dividing line between illegitimate and legitimate practitioners more sharply drawn than in ours, because in no other country do medical men occupy so high a social grade.

After Dr. Gross had taken the chair, and returned thanks for the honor conferred upon him, the meeting adjourned until 10 A. M., to-morrow.

Second Day.—Drs. T. G. Richardson, of New Orleans, and N. S. Davis, of Chicago, moved that all the reports from the several sections be ordered to be published; and that the Congress shall not be held responsible for the conclusions. It would be impossible for the Congress to get through with discussions for several months, if a contrary course was taken. The members of the several sections have given the subjects committed to them great attention, and they have been freely and fully discussed. It should therefore go out that the deductions are those of the sections—carried.

The Secretary read letters of congratulations from the Imperial Medical Society, of St. Petersburg, and from the Norwegian Medical Society.

Dr. J. M. Toner, of Washington City, submitted the following resolutions, which were unanimously adopted:

Resolved 1. That the members of this International Medical Congress regard with great interest the institution of a National Medical Library, in the city of Washington, and respectfully petition the Congress of the United States to provide for additions to the number of volumes and periodical publications, until the library is as complete as possible.

2. That in view of the necessity of what is known as a *catalogue raisonné*, in order to render the library properly available for reference, this International Medical Congress urges the importance of an early completion and publication of such a catalogue.

3. That the specimen fasciculus of the catalogue, which is stated to be nearly ready for the press, affords evidence of great labor and care, and the arrangements for convenience of reference, it is believed, will prove in all respects satisfactory.

4. That those of the delegates to this International Medical Congress, who are citizens of the United States, and other members of the medical profession in this country, are urged individually to exert their influence to secure the enlargement of the library and the speedy publication of its catalogue.

Address on Hygiene and Preventive Medicine, by Henry I. Bowditch, M. D., President of the State Board of Health of Massachusetts. The address occupied fully one hour in its delivery. The gentleman, on making his appearance, was received with applause. He said that public hygiene had been woefully neglected; but of late a new and better era has been dawning. In regard to medical social ideas, the past century divides itself into three unequal epochs. The era of theory and dogmatism extended from 1776 to 1832; of careful observation from 1832 to 1869—this epoch being often marked by bold and sometimes reckless skepticism; the third epoch, from 1869 to 1876, is distinguished by State preventive medicine, and is destined to progress while the nation lives. He then referred to the illustrious Boerhaave and his doctrines; after him came Hoffman, Cullen, Brown and Darwin, each with his own system. In 1790, our own Benjamin Rush proclaimed that the proximate cause of all fevers is the convulsive motion of the arteries. Rush had more influence than any other man upon the medical opinion of the first epoch; but his theories fell under the influence of Broussais' theories. The medical profession owes to the laity the first great effort in behalf of State preventive medicine, especially to Lemuel Shattuck, of Boston, and Edwin Chadwick, of England. Much has been done, but a great deal remains to be accom-

plished in the promotion of public hygiene. The speaker favored the establishment of State sanitary boards, and commended the sanitary laws of Massachusetts to those States which have as yet taken no steps in the matter. Among other matters noticed, and which Dr. B. considered of great importance, is the adulteration of food. He also recommended the establishment of an international code of health, which, though such a step may be far in the future, will inevitably come. There should be a national law for enforcement of vaccination, and every foreign nation should adopt it. Allusion was made to the construction of tenement-houses, which was a matter of great concern. Sickness is engendered by reason of the packing of persons together with no regard to cleanliness. To remedy the trouble arising from tenement-houses, the authorities will have to make stringent laws relating to their sanitary condition, and enforce them. A number of other matters were alluded to, such as sewage, irrigation of lands, and the necessity for steps to be taken by which drinking water may be kept pure. The following States have State Boards of Health: Alabama, California, Dist. Columbia, Colorado, Georgia, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Virginia, and Wisconsin. Dr. B. maintained that our present duty is organization. There are annually about 200,000 deaths from preventable diseases in the United States.

At the conclusion of the address, Dr. Theodore G. Wormley, Professor of Chemistry in Starling Medical College, Columbus, Ohio, addressed the Congress on **Medical Chemistry and Toxicology**. He reviewed the progress made in chemistry, and the developments that have been made through that science. A high and deserving compliment was paid to Dr. Benjamin Rush, the great professor of chemistry in this country, and also the first (1769) to fill the chair of chemistry in an American college—the University of Pennsylvania. A tribute of respect was also paid to the memory of Prof. Robert Hare, who was professor of chemistry in the same institution, and became distinguished in both countries by reason of his invention of the compressed blow-pipe. After tracing the introduction of the science into the various institutions, the speaker referred to chemistry as applied to medicine, and remarked that it was a broad domain upon which to enter. A considerable portion of the address was devoted to the consideration of poisons and their antidotes. It was incidentally stated that in the early part of the century, less than one grain of arsenic could not be detected. The discovery and the tests were alluded to at length. As an historical effort, the address was one of great ability, and invaluable to the medical profession. Adjourned until 10 A. M. to-morrow.

Third Day.—On motion of Dr. John L. Atlee, of Lancaster, Pa., it was ordered that the Publication Committee shall forward a copy of Dr. Bowditch's address to the Governor of each State and Territory, with the request that the subjects treated of be presented to their respective legislatures. On motion of Dr. Trenholme, of Canada, the same motion was extended to each province of the Dominion Government.

A communication from the National Temperance Society, was read, inviting a declaration to the effect that alcohol should be classed with powerful drugs; that it is in no sense food to the human system; and that total abstinence from alcoholic beverages be recommended to the several nationalities represented. The communication was tabled.

The Section on Medicine recommended through Dr. E. C. Sequin, of New York, the following, which were adopted:

Resolved, That the International Medical Congress of 1876, recognizes the advantages which would accrue from the introduction of a gradual uniformity in the multiple and heterogeneous elements of physic, as posology, nomenclatures, &c., and in the means and records of medical observation.

Resolved, That in consequence, this Congress authorizes the President to appoint three delegates to the International Congress of 1877, with the special mission of presenting a schedule of the means of uniformity in physic actually applicable in all countries, and another of those which could soon be made acceptable by the profession at large.

Resolved, That the said delegates be advised to invite the co-operation of the men who have already worked for the same cause at the International or National Medical or Pharmaceutical Congress of Paris, Vienna, St. Petersburg, Brussels and Buffalo.

Prof. Rudnew, of Russia, was called to the chair.

Dr. Paul F. Eve, Professor of Operative and Clinical Surgery, University of Nashville, read a paper on **Surgery**. He said, while this may be the Centennial of National Independence, it is not that of the profession. It was as late as 1820 that the taunt was uttered, "What does the world yet owe to an American physician or surgeon?" He who may be regarded as the father of American surgery, Philip Sidney Physick, was only eight years old at the time of the Revolution. He was among the first to apply animal ligatures, employing buckskin for that purpose. A striking proof of Dr. Physick's appreciation in Europe, was that his work became the text-book in the University of Edinburgh. Of him it has been said that he never spilt a drop of blood uselessly. Intimately connected with the rise and progress of surgery in America were four others, viz: War-

ren, of Boston, Mott, Dudley, and Gibson. Valentine Mott was a native of Rhode Island. Dr. Dudley was a native of the West, and spent several years in Europe. He gave but little medicine, but insisted upon the observance of hygiene. He was for years the surgical patriarch of the West. He performed lithotomy 225 times, and lost but 6 patients. William Gibson was born in Baltimore in 1784. It was he who extracted the ball from General Scott at Lundy's Lane. Dr. Gibson was probably the best lecturer we have ever had in America. His memory was so retentive that he was known to repeat 300 lines of Virgil. He performed the Cæsarean section twice on the same patient, saving mother and child. American surgeons present a creditable report on the subject of amputation. The official reports of the late war show that the mortality in the medical staff was greater than that of any other. Not less than fourteen foreign journals noticed our army medical reports. In the Prussian service our ambulance system was adopted. It has been reserved for American surgery to teach the world how to relieve or prevent human suffering. Fifty years ago not a half dozen Americans were known abroad as surgeons; but in 1859, Dr. Reese, in preparing an American edition of Cooper's *Surgical Dictionary*, introduced no less than 109 American contributors.

Among other things of interest in this address, Dr. Eve said that Dr. A. W. Smythe, of New Orleans, in 1864, tied the carotid and vertebral arteries, and the patient lived ten years, dying of a second operation on the mammary artery. The ligation of the vertebral artery has been done by several. Dr. Cogwell, of Hartford, in 1803, first tied the common carotid. Until Dr. Gross published this fact, Sir Astley Cooper had all the credit of it. Dr. Wm. T. Briggs, of Nashville, was the first to apply two ligatures to the internal carotid. Prof. Post, in 1817, first successfully tied the subclavian, others abroad having failed. Dr. W. Stone first applied metallic ligatures to a wounded artery. Dr. S. W. Gross has shown the comparative innocuousness of applying ligatures to veins. The practice of ligation of vessels for the relief of gangrene is of American introduction. Arterial compression was long known in this country. The employment of the Hunterian method of ligation as a means of prevention, or for the relief of destructive inflammation, was proposed in the United States. Dr. Carnochan first ligated the femoral for elephantiasis, and afterwards, in the same case, the external iliac, successfully. Dr. Jonathan Knight was the first to treat popliteal aneurism successfully by digital compression. Dr. Daniels, of Georgia, first introduced extension by weights and pulleys in fractures; but Dr. Eve believes that the

os femoris, when fractured at certain points, cannot be extended to its full normal length, and so maintained, without impairing its nutrition.

Manipulations for reduction of fractures by Dr. William R. Reed is called by Mr. Spencer, the American or circumduction method. The discovery of the anæsthetic effect of ether in its relation to surgery was referred to, and also the important diagnostic sign described by Dr. L. A. Dugas, of Georgia, by which absolute distinction was readily made between fracture and dislocation at the shoulder. Dr. J. Rhea Barton, according to Erichsen, performed the first resection for bony ankylosis. Dr. Mussey, in 1837, performed excision of the whole scapula. Barton, Brainard and Buck were the first satisfactorily to relieve osseous deformities. Various other cases of resection of special bones were referred to.

Dr. Mott founded the first orthopædic hospital in this country. Dr. Sayre has done more work in this department than any other person. Primary amputation at the hip-joint for wounds was first successful in 1806. Three or four successful cases are reported in the late war; previously in foreign wars all had failed. If not for the record of these successful cases, says von Langenbeck, the Prussian Surgeon-General, it is doubtful if the operation would not have been prohibited. The use of silver wire by Sims in uterine surgery was also referred to. Numerous other operations shed lustre on American surgery.

Dr. J. M. Toner, of Washington, D. C., addressed the Congress on **Medical Biography**. He appeared to discharge the duty assigned of preparing a biographical retrospect of the medical profession of the United States during the Centennial period just passed. In glancing over the period, he was struck by the paucity of really striking events which influenced the practice of medicine, and that have left special marks at the end of the first century of our national existence. Wars have generally been promotive of medical science, and our profession was no doubt much benefited by the contest for independence. For the first quarter of a century after this armed struggle, the leading physicians and surgeons were those who had served in the army. The most notable event of this period was the occurrence of an epidemic yellow fever, which appeared in the summers of 1793 and 1798, in nearly all our Atlantic cities. This disease tested the courage and taxed the energies and best skill of the profession, and prompted the more eminent to reduce their observations to writing, and to have them published either in defence of their practice or for the laudable purpose of making contributions to medical science. The second quarter of the Centennial period

was distinguished by the introduction of vaccination, the occurrence of spotted fever, and the war of 1812. All of these were events which stimulated the profession to more extended studies, and became incentives to authorship. This was especially true of the disease known as spotted fever. The war of 1812 proved to be another great school of experience, although it was not fruitful in medical reports or publications. The aspiration which it aroused, however, in the profession, gave an impetus to the establishment of medical periodicals, and the founding of medical colleges and hospitals. In following out the plan of dividing the century into quarters, the third may be marked as noted for the discovery of anaesthesia, the epidemic of Asiatic cholera of 1832 and 1848, and the war with Mexico, as well as the discovery and the application of many new and improved methods of physical exploration in the search for disease. The last quarter, which has just closed, is specially distinguished by the vast experience of the late war, which was a great school, and which has benefited the medical profession of the whole country. Sixty-five thousand American physicians died during the century.

After some further remarks complimentary of leading physicians during the past century, the Congress adjourned.

Fourth Day.—The President announced the appointment of Drs. H. I. Bowditch, J. J. Woodward, and E. C. Sequin, as the delegates to the Convention in Geneva, in 1877, as ordered in a resolution adopted yesterday.

Dr. Bowditch offered the following which were adopted:

Whereas, The work already accomplished by the officers connected with the Bureau of the Surgeon General of the United States, in the establishment of a Medical Library, and in the preparation of its ample and unique catalogue; in the formation of an Anatomical Museum, from which important scientific results have already been obtained, and which have been not only a source of honor to these United States, but of value to foreign lands, where science is cultivated; and

Whereas, This Congress learns with regret that owing to a lack of sufficient clerical force and pecuniary means, not only some of the work already in progress has been suspended, but that other work of equal value cannot be undertaken, although ample material for the same are now laying unused in the Surgeon General's office. Therefore

Resolved, That a committee of three be appointed to prepare a memorial to be presented to the Congress of the United States, at the earliest day possible at its next session, urging efficient support to these most important works.

Resolved, That it is desirable that said memorial should be

signed by the President, Vice President and permanent Secretary of this body.

Drs. Bowditch, Rudnew and N. S. Davis were appointed to prepare the memorial.

Dr. J. P. White, New York, said that politicians did not care anything for sanitary science, and that it was well enough to send a copy of the paper of Dr. Bowditch to the Governors of the different States, but it was too important to let the matter rest with depositing the papers in the pigeon-holes of the Governors. He moved that copies of the address be sent to the President of each State and Territorial Medical Society in the United States and in Canada, and to each Sanitary Board, requesting them to bring the subject before the next meeting of their organizations. Carried.

Dr. John L. Atlee, of Lancaster, said that each individual should use his personal influence with the Governor of his State.

Dr. H. Miyake, of Tokio, Japan, occupied the chair during the reading of a paper **On Obstetrics**, by Theophilus Parvin, M. D., Professor of Obstetrics in the College of Physicians and Surgeons of Indiana. He said, the germ of American obstetrics was British, rather than French. Seventy or eighty years ago, the practice of obstetrics was almost exclusively in the hands of women. The name of Williams Potts Dewees should live forever. He has by his works reared a monument more enduring than quarried granite or molten brass. Of the late Dr. Hugh L. Hodge he said, few men have studied the mechanism of labor more thoroughly—none have expounded it more clearly. Generations may come and depart until another century pours its treasures upon the race; but it is doubtful if among these will be found another work on Obstetrics of greater relative merit, and of more enduring value, than the work of Dr. Hodge. The present century has been marked by some of the most important advances in obstetrics. Anæsthesia must be considered one of the greatest glories of obstetrics. The administration of chloral for relief of pain has also had many advocates in this country. An advance has been made in the more liberal diet and hygiene of women. The speaker referred, among other things, as signs of progress, to the establishment of Women's Hospitals. It is impossible to give in our space an outline of this address, or an idea even of the eloquence of the speaker.

After a brief recess, Dr. Stanford E. Chaillé, Professor of Physiology and Pathological Anatomy in the University of Louisiana, delivered an address on **Medical Jurisprudence**. He said medical jurisprudence owes its power to knowledge derived from

every branch of medicine, but the law determines how far this power shall be utilized in the administration of justice. Hence the development of medical jurisprudence has varied in different nations with the progress of medical science, and with the extent of its applications to the protection of property, reputation, and life. Efficiency in this legal application varies with the appreciation of medical knowledge by the rulers of a nation, and it results that laws more favorable to the culture of legal medicine are to be found in nations ruled by the educated few than in those governed by the people.

The Papal canon laws, originating many medico-legal questions, sowed in 1620 by the hand of Zacchias, a Pope's physician, the first sound seed of medical jurisprudence in the land of Columbus, then the home of science and the arts. The new-born shoot, languishing in Italy, was transplanted to German soil, where it received such culture as nourished its growth, and reproduced seed to germinate in other lands.

To favoring legislation from 1532 to the present day, the Fatherland owes its pre-eminence in medical jurisprudence. Germany, for two centuries, has had an organization of medico-legal officials, to whom alone it entrusts the duty both to procure the medical facts needed by the courts, and to estimate the weight due such facts, from whatever source obtained; it alone requires that these experts shall be specially educated, and provides medico-legal clinics for their practical instruction. Germany has excelled in the culture of this art. In 1650, Michaelis delivered the very first lectures, and, as early as 1720, professorships of legal medicine were founded by the State.

France, from 1570 to 1692, enacted laws which, like those of Germany, favored the culture of legal medicine; but in 1692, medico-legal offices became hereditary, and venal and legal medicine languished. Since 1790, no nation has surpassed France in the culture of this science. The judges appoint medical experts; these, since 1803, must be graduates in medicine and have passed an examination in legal medicine. How much of medico-legal science has been transported from Germany and France to Great Britain and the United States would, I fear, prove offensive to Gallic, and still more to Anglo-American vanity.

Great Britain transmitted to this nation laws barbarously conspicuous for the absence of provisions to apply medical knowledge to the administration of justice, and Anglo-American law continues to be, in large measure, hostile to medical jurisprudence. However, British laws have done something for the science, and a little for the art. For Great Britain has fostered medical ed-

ucation; in 1803, founded a chair of forensic medicine in one university, and has now such chairs in all its medical colleges; has by the registration act and other laws, greatly strengthened the medical profession, and has compelled its courts to accept expert evidence only from registered, and therefore educated, medical men. Still "the crowned republic" remains destitute, as does its democratic American offspring, of popular, hence of governmental, appreciation of the legal importance of medical knowledge, as is proved by the same lack of any system to secure the medical evidence of competent experts, as characterized its laws when surgeons were barbers, and physicians were astrologers, sorcerers, and interpreters of dreams. What wonder that Germany and France began the study earlier, and have prosecuted it more successfully.

The States of the Union have for the most part left the culture of medical science to individual enterprise, which supplies solely that which the private citizen demands—practitioners of medicine to heal the sick. The States have as yet made no demand for competent medical experts to aid in the administration of justice, and have done nothing designedly for the culture of medical jurisprudence. What growth can this branch of State medicine have so long as a State does not recognize even its existence?

From 1620 to 1722, the authority of the father of medico-legal science was supreme. Until 1726 it was taught that in the presence of the murderer his victim's wounds did "open their congealed mouths and bleed afresh," and courts accepted the testimony of medical experts to this miraculous bleeding of the corpse. The effect upon a suspected homicide of touching the body of his supposed victim continued to be a legal expedient within the nineteenth century. Superstition, denouncing medico-legal autopsies even more fiercely than it now does cremation, did not permit these to become frequent until 1750. The highest medico-legal authorities taught belief in ghosts, witches, and possession by the devil, and united with the clergy, until 1752, in denouncing all disbelievers thereof as heretics and atheists.

During the 100 years now closing, the progress of medicine has been greater than in all preceding time. Innumerable precious facts have been contributed by every branch of medicine. The study of putrefaction, fractures, burns, scars, marks, stains—in fine, of every change and injury to be found on the living or dead body—has given the skilled expert a power (miraculous to the ignorant) to identify the body, to distinguish real from apparent death, to approximate the date of death, to decide whether it be due to morbid, accidental, or criminal causes, and often to point unerringly to the criminal. In the United States there

are probably 45,000 medico-legal autopsies made annually. The services of a skilled expert at these "coroners' inquests" is of inestimable importance. The opportunities there presented, if once lost, can never be regained. Further, our courts have annually from 4,500 to treble this number of criminal trials necessitating medical testimony. Whatever the number may be, it would indicate inadequately the number of citizens whose welfare is involved in the efficient application of medical knowledge to the administration of justice.

What are the methods which Anglo-American law adopts to secure in practice that "best attainable evidence" which, in theory, it demands? It entrusts medico-legal autopsies, which require special medical and some legal knowledge, to those having neither the one nor the other, except by accident. For these, coroners—whose inexperience our law assumes by constant "rotation in office"—owe their position solely to political popularity, a qualification which a competent expert is most unlikely to possess. Are these unqualified officials supplied with efficient aid? If so, again by accident, since the law leaves it to chance, or to the coroner, or to his still less qualified jury, to provide a medical expert; and, as usual, accident and ignorance provide inexperience and incompetence. Could ingenuity devise for medico-legal autopsies any methods more inefficient than these, which Anglo-American laws, framed before the birth of medical jurisprudence, have barbarously perpetuated?

With the power of medical science thus crippled at the coroners' inquests, then prostituted by the partisan opinions of incompetent experts, then perverted by advocates, and at last, when emasculated of all vigor, submitted for decision to those unable to estimate its weight, what wonder that such gross misapplication of medical knowledge brings upon it that public contempt which justly belongs to methods so monstrous, and to which true medical knowledge is a helpless, pitiable and disgusted victim!

But these legal defects, so paralyzing to the past, so discouraging to the future of Anglo-American jurisprudence, are not the only disadvantages against which this nation has had to contend.

The first chair of medical jurisprudence was established by the College of Physicians and Surgeons of New York city, and filled by Dr. James S. Stringham, in 1813. In 1815, two other colleges had chairs devoted to the usual branches, with medical jurisprudence attached to some one of these. In 1825, there were about 22 medical colleges, and of these only one had a full chair.

So great has been the diffusion of knowledge, so ardent the love of justice, we have, in the main, kept pace with, and, in many particulars, outstripped the mother land. Fairly we can name no more; reasonably, no more should be expected.

Fifth Day.—Dr. P. F. Eve, Nashville, offered a resolution prohibiting the publication in medical journals, either entire or in abstract, the papers read before the Congress, until they have appeared in the printed minutes. Adopted.

Dr. N. S. Davis, of Chicago, offered the following resolutions, which were adopted:

Resolved, That the Committee on Publication be authorized and instructed, as soon as practicable after the final adjournment of the Congress, to ascertain the probable cost of publishing the full transactions in a style appropriate for the work; and if the money on hand is found deficient, they shall address a circular letter to each American member of the Congress asking for such additional sum, not exceeding \$10 for each of such members, as will supply the deficiency; and that said committee be authorized to withhold the volume or volumes, when published, from any member who may neglect or refuse to pay the additional sum required.

Resolved, That the Committee on Publication be authorized and requested to exercise a careful and liberal discretion in preparing and revising the proceedings and reported discussions in the several sections for publication in the transactions of this Congress.

A communication from the Women's National Temperance Union was received, calling the attention of the Convention to the subject of intemperance, this, with a letter from the American Temperance Association, was referred to the Medical Section.

Dr. Hunter McGuire, Richmond, Va., was called to the chair.

Dr. John P. Gray, Superintendent and Physician of the New York State Lunatic Asylum, Utica, New York, read a paper on **Mental Hygiene**. The Doctor, after dwelling upon the subject from individual, national, and social points of view, spoke of political economy and sociology in reference to their near relation to it, and declared that the subject covered the broad field of human energy. Only lately has mental hygiene been particularly demanded in the progress of science as a separate study. In a national point of view, no nation is substantial unless it has religion for its foundation stone. The lesson of mental hygiene for nations, which we learn from all example is, not that education and wealth, nor the refining influence of æsthetic art, will suffice for the highest development of national mind; but that if underneath and through all these are

not interwoven the great truths of moral responsibility to the author and upholder of all governments, lifting man above the dominion of the baser passions, the nation dies as an individual dies; for "Unless the Lord build the house, they labor in vain who build it." And may we not say that the influence of this illustrious example (referring to a poem by George Herbert) had some share in determining the tone and the practice in that respect of this renowned University from its foundation, whose successive provosts have been eminent illustrations of the essential harmony between the different qualities of faith and science? This thought has come to his mind since entering this hall and reading the inscription.

Dr. T. G. Richardson, of New Orleans, was called to the chair.

An address on *Medical Literature* was next read by Lunsford P. Yandell, M. D., late Professor of Physiology, in the University of Louisville, occupying nearly an hour. This address contains a complete list of American medical works in the order of their publication. The first American medical journal was begun in 1797; the number since projected is about one hundred, of which over fifty have been withdrawn.

An invitation was extended to the members to inspect the Medical Department of the University, the University, and the Pennsylvania Hospital to-day.

Sixth Day.—Dr. Sayre, New York, offered the following, seconded by Mr. Carter, of London, in a beautiful speech, which was unanimously adopted by the Congress:

Resolved, That this International Congress request our President, Prof. Gross, to sit for his portrait, and that the Committee on Publication be instructed to have the same engraved and printed as the frontispiece to the volume of our Transactions.

(It is understood that, for the sake of exactness, this shall be a photographic likeness, unless otherwise ordered by the Committee).

Dr. White offered a number of resolutions of thanks, which were unanimously adopted.

Dr. Bowditch offered the following, which was adopted:

Resolved, That we, a brotherhood of physicians from the North, South, East, and West of this country, hereby tender to our associates from other lands, our most earnest wishes that they may have safe and happy returns to their homes; and we would suggest the hope that they will carry back many pleasant memories of this fraternal meeting now closing, and which has been most appropriately held in this generous and noble city of Philadelphia.

Prof. Charles J. Hare, of England, followed with a letter of

congratulation from the delegates of Great Britain. Dr. J. A. Grant, of Canada, also offered some friendly resolutions on the part of Canadians present.

The Secretary-General stated that he had received a circular announcing that an International Medical Congress would be held in Geneva in September, 1877.

Dr. Henry Gibbons, California, was called to the chair.

The Secretary announced that the register contained the names of 480 delegates.

An address on **Medical Education and Medical Institutions**, was read by Dr. N. S. Davis, Professor of Principles and Practice of Medicine, Chicago Medical College. In 1752, the only general hospital in the country was founded in Philadelphia. There were soon after 3,000 practitioners in thirteen States, only two medical colleges, and two organized medical societies. He referred to the early establishment of schools in Philadelphia, the degrees then conferred, with sketches of the relations existing between the schools of that city in the latter part of the century, with the regulations of each for study and graduation. Columbian College, New York, was the first to confer degrees of Doctor of Medicine. A detailed account accompanied the report, enumerating all the medical colleges founded since the beginning of the century, with their dates of institution. From the close of the Revolutionary war to the present time, 77 colleges have been founded, not counting a few very transient and ephemeral ones. Sixty-one are now in active operation. In 1875-6, there were in all the States 6,650 students, of whom more than 2,200 received the degree that session, not including those in pharmacy or dentistry, or those conferring degrees founded on exclusive dogmas. Generally, medical education is not dependent on legislative aid.

After a few well-expressed remarks as to the inestimable value of the Congress, and of good wishes for all the members now about to separate, the President announced the labors of the Congress completed. The body then adjourned *sine die*.

OUTLINES OF PAPERS READ BEFORE SECTIONS. *

SECTION ON MEDICINE. **Typho-Malarial Fever—Is it a Special Type of Fever?** The Reporter, Dr. J. J. Woodward, Asst. Surg. U. S. Army, made some preliminary remarks on the mortality of armies from disease, with comments on the comparison recently drawn by Prof. Virchow, between the mortality of the U. S. armies during the late civil war, and that of the German armies during the war with France. He then spoke of the

*After we had gone to press with the last form, the *Medical Times* was received, from which we have derived valuable aid in compiling some of these *Outlines*.—EDITOR.

fatality of camp fevers during the American civil war. There was a general belief among medical officers that these fevers represented a new type of disease. The proposition, however, which he submits is that whenever great armies campaign in malarial regions, the prevalent fevers are hybrids, between malarial fevers and some form of typhus, and are not special types of disease. Historical proofs were drawn from the siege of Naples, 1528; from the Hungarian campaigns from 1526 to 1788; from the morbus mucosus of Røederer and Wagler; from the Walchern expedition of 1809; and from Virchow's comments on the fevers of the German army in France.

He next made some remarks on the distribution of malarial and typhoid fevers in the United States. New England, New York, West Virginia, and some other sections are free from typho-malarial fever; but it prevails in the Southern States, and on the Atlantic coast, increasing as we go South. Typhoid fever is more frequent in the North, but exists everywhere. It decreases as we go South, but areas occur in which it is prevalent.

As to season of the year, typho-malarial fever, like typhoid, occurs most intensely in the autumn. Leibermeister compared the statistics of typhoid fever, and found it generally autumnal, except in Milan. In numerous portions of America, intermittent and remittent fevers once prevailed where they are now scarcely known to exist. Intermittents decreased, and remittents took more and more the form of typhoid fever. When periodic fevers become epidemic, typhoid fever retires until the former disappear. Drake and Dickson early recognized the hybrid forms of these diseases, and since them, Europeans have frequently remarked it.

The term^a typho-malarial fever, was never meant to represent a specific type of fever, but simply to designate all the many-faced brood of hybrid forms resulting from combined influence of the causes of malarial and of enteric fevers.

There were two great groups of cases during the civil war. In one, the malarial element at first predominated; but after a week, typhoid symptoms set in, although some symptoms were absent, as rose spots and diarrhœa. Many cases, Dr. W. thought, recovered because of the free use of quinine. In fatal cases, there was evidence of only sharp catarrh of the bowels; but sometimes Peyer's glands were swollen and pigmented, or the surrounding mucous membrane was pigmented. In other cases, the spleen and liver were enlarged, and a diphtheritic condition of the mucous membrane of the bowels was found. In short, every variety of difference between typhoid and intermittent existed. In the other group of cases, typhoid predominated; but there

was an unwonted tendency to intermissions. There were also agues and gastric disturbances. After death, these cases showed only typhoid lesions. The spleen was much enlarged in many cases. Uncomplicated typhoid was not the prevailing form, whatever may have been said.

During the war, a scorbutic taint was also wide spread, and must have influenced the general condition of fever patients. In fatal cases, Peyer's patches appeared as black sloughs, evidently modified by the scorbutic element. This element was only the accident of the war. Dr. W. believes, however, that, notwithstanding what has been said, simple uncomplicated typhoid and simple remittent fevers did now and then occur.

Drs. Bartholow and Scott, of Ohio, Pepper, of Philadelphia, and Edge, of Camden, in the discussion, dwelt upon the frequent occurrence of hybrid types of the two diseases which make up typho-malarial fever, and upon the varying forms and prevalence of the disease in certain sections during long periods of time. As it prevails in malarial regions in times of peace, it also demands the closest investigation of physicians in civil practice.

After full discussion, the Section adopted the following conclusion: Typho-malarial fever is not a special or distinct type of disease; but the term may be conveniently applied to the compound forms of fever which result from the combined influence of the causes of malarial fevers and of typhoid fever.

Prof. Estlander, of Finland, presented an interesting paper on the alternation of malarial and typhoid types of typho-malarial fever in certain regions of his native land. Referred for publication.

Are Diphtheritic and Pseudo-Membranous Croup Identical, or Distinct Affections? Reporter, Dr. J. Lewis Smith, Physician to New York Infant's Hospital, maintained that croup is a local malady, while diphtheritic laryngitis is but the expression of a general malady. True, the anatomical characters are identical in kind, as regards the state of the larynx; but they differ in degree or intensity. Clinical facts were adduced to indicate the duality of the disease.

Dr. Pepper called attention to the anatomical identity of the two diseases, and suggested that chemically and microscopically no distinction between them has been demonstrated, either in the exudation itself or in the mucous membrane, except it might be a slight question of degree, scarcely in itself sufficient to establish the view of essential diversity of nature. He regarded it as hazardous in the extreme to assert that these diseases are radically distinct, and found himself constantly drifting more and

more towards the view that there is a constant pathological analogy between the two, that they are forms of one great pathological condition. He admitted the difficulty of discussing at present the question of contagion.

Dr. Gibbon, of California, is convinced that the distinction is real, and that there are two diseases to be dealt with. It seems the wheel must turn, and, in medicine as elsewhere, every 20 or 30 years a revolution must take place; and we now see a disposition to regard these diseases, which we have learned to know as two, separate and distinct, again as one and the same.

Dr. Hare, of London, stated that this is now a special subject of investigation in a sub-committee of the Medico-Chirurgical Society of London. He desired to hand to the chairman a printed list of questions bearing on the matter, which have been prepared by that committee for circulation, with a view to obtaining the facts as they occur to the profession at large. He adduced the contagiousness and the paralytic *sequelæ* of diphtheria as unanswerable arguments in favor of the non-identity of the two diseases.

Dr Howard, of Montreal, could not believe that the matter is one definitely settled in the minds of scientific men. Not only is the London profession in doubt, but also physicians of the French school have always taught and still teach that there is but the one disease. The paper of Dr. Smith was an excellent presentation of much that was true, and a great deal of long, honest work would have to be done before some of its statements could be controverted. The need of careful *post mortem* examinations of undoubted and unquestioned cases of so-called pseudo-membranous croup was pointed out.

Remarks were made by Drs. Smith, of Massachusetts; Oldright, of Toronto; Carr, of New York; Bartholow, of Cincinnati; Maddin, of Tennessee; Ayres, of Indiana; Davis, of Chicago; Hamilton, of Nova Scotia; and Woodward, of Washington.

Do the Conditions of Modern Life Favor the Development of Nervous Diseases ?—Dr. Roberts Bartholow, Professor Theory and Practice of Medicine Medical College of Ohio, the Reporter, alluded to the numerous references in the writings of the ancients to mental and nervous maladies. He remarked upon the influence in ancient times of those conditions supposed to be most active in our day in the production of nervous maladies, viz: social excitements, political revolutions, sexual excesses, indulgence in wine. He next referred to the recognition of nervous maladies in the sixteenth century. If in modern times an increase in nervous maladies had occurred, the result must be

exhibited to a limited extent in an increased sickness and mortality rate. With the improvement in the general well being wrought by our modern civilization, a manifest increase in longevity has occurred. With an improved hygiene, the sickness rates and the mortality from epidemics have diminished. He thinks the supposed increase in the number of nervous diseases is more apparent than real.

The art of printing has greatly increased the diffusion of knowledge among men; and hence every medical fact has not only a more prominent record, but is more generally known. In modern times, within this century especially, nervous diseases have been more accurately studied and better differentiated. Moreover, the growth of a higher humanitarian sentiment has led to a more abundant provision for the insane.

The Section recommended the publication of the paper, without, however, expressing an opinion on the question involved.

Dr. Green stated that the ancients were well acquainted with these diseases. Apoplexy was well known in Scriptural times, and many of the characters of biblical history suffered from it. In these times it is said too often that the subjects of these diseases are the victims of mental strain and worry; but the ancients, who likewise suffered from them, had not the business strain of this day. Statistics of insurance companies show an apparent increase in recent periods of the death rate from nervous diseases; but this increase, as shown by the figures, is due to the fact that more old persons insure their lives to-day than formerly. The percentage of insanity was exceedingly small, and, compared with that of whole communities, even that of apoplexy was not large. From personal observation, he was disposed to regard such diseases as very rarely the result of overstrain.

Dr. Gibbon said that there is nothing in the records of antiquity nor in modern statistics to settle the question. The figures of insurance companies cannot be relied upon. Mortuary statistics refer to deaths, and do not indicate the prevalence of diseases of this kind. If Dr. Bartholow were to reside in California, he would change his mind as to the increase of nervous disorders in that quarter. The increase is conspicuous, and there are causes operating which must have that effect. A large portion of the population consists of men without family ties or settled homes. Passions of all kinds get control. Wild speculations prevail. The making and losing of fortunes in a day not infrequently occur; and men engaging in such a life too often end it by insanity or suicide. The number of cases of cerebral disease is notable. He was not prepared to say what the condition of society in old and settled communities might be in

reference to this question, but he believed that moral and physical causes of a disturbing character were more abundant than formerly everywhere.

Dr. Neftel had no doubt that the causes of nervous diseases have increased in modern days. He alluded to the influence of heredity in augmenting such disorders; the effect of the change of occupation in causing greater and much more general mental activity, the present extended use of alcoholic drinks, and to syphilis. The last is a fruitful cause of nerve-disease, and is not found to have existed among the ancients.

Dr. Maddin agreed with the author of the paper that there were no new diseases, since all disease is but an error of the tissue or function of an organ; but that modifications of diseases arose out of the peculiar surroundings of modern life.

Dr. Arnold, of Baltimore, thought that the opinion that nervous diseases had increased in modern times originated not with the profession at large, but with the specialists. If they were increased, it must be attributed to the influences of modern life, and especially to the race for wealth, and the close competition resulting from it. Intellectual men are generally long-lived. He thought shocks more detrimental than close and long application. Anciently, wars and turmoil were more common. To-day the mind is trained and disciplined, and thus made, to an extent, proof against shocks. He believed that the nervous system accommodated itself to the strain put upon it. The agency of syphilis in causing insanity was, to him, an obscure one. Medical men allow themselves to be influenced by the tirades of temperance orators. It was difficult to establish alcohol, as at present used, as having a marked influence in the production of insanity. He believed that periodical drunkenness, instead of being a cause of mental disease, was, in nine cases out of ten, only the warning of its approach.

Dr. Davis regarded the question as of very wide scope, and as extremely difficult to determine, in the present state of our knowledge. The present state of society in California had been mentioned. Compare the Crusades, in which all Europe was aroused by a religious war, and armies went forth by the hundreds of thousands to the field of battle. Here was a condition adequate to produce, and which doubtless did produce, special tendencies towards the development of mental disease. He thought very few brains ever wear out by work. Increase of nervous diseases was to be attributed to other causes, and instanced wickedness. He thought that Saul got his paroxysms of mental derangement from wickedness—not from study—and that most of the mental disease of to-day arises from the same

cause. Alcohol, tea, coffee and tobacco have much more to do with the etiology of nervous diseases than brain work.

Dr. Howard, of Canada, spoke also of the abuse of the various stimulants as a cause of nerve-diseases. The part played by syphilis in producing diseases of this class was a well established fact. The men of to-day also work faster, in fact, at express rate. Everything was done in a hurry. If by this, organs are disturbed, that disturbance is transmitted to nerve-centres, and its prolonged action gives rise to impaired health. The weight of evidence favors the idea that there is a tendency towards increase of diseases of the nervous system.

Dr. Bowditch, of Boston, partly attributed to the climate, and to constant and intense political excitement, causes not yet noticed, the increase of nervous diseases in America.

Dr. Green said that suicides prove nothing. Many people commit suicide from bad humor, from love, etc. The idea that a man could hurt himself over books is preposterous; he might fret himself.

Dr. Bartholow reviewed some of the points brought out in the discussion. He thought that the statements of specialists should be taken with a great degree of allowance. They seemed to have based the opinion that nervous diseases were increasing upon the fact that they see more cases than formerly. They forget that that is the result of the increase of their individual business as their practice grows and their reputation extends. The assertion that had been made to the effect that syphilis is a modern disease is doubtful. His great answer to the argument was that men are larger, stronger, and better in every way than in former times. A modern Englishman could not wear the old armor. Men were also able to do more intellectual work. If the Geneva statistics were worth anything, they prove that the longevity of man has doubled within three centuries. As to the climate of America, it has been found that longevity is greater here than in England.

Dr. W. B. Neftel, of New York, then read a paper on the *Etiology of Epilepsy*, which was referred for publication.

The Influence of High Altitudes on the Progress of Phthisis.—The Reporter, Dr. Charles Dennison, of Denver, Colorado, first referred to the past history of the climatic treatment of phthisis. The climates of high altitudes were considered by their important attributes, which were contrasted with the same qualities in less elevated health resorts; in America the elevated inland plains and "backbone" of the continent, between elevations of four and ten thousand feet, being matched with sea-side and inland resorts below the elevation of two thousand feet.

Too much importance has been placed upon *equable temperature*, equability often entailing excessive moisture and other conditions comparatively unfavorable to the majority of consumptives. Cool, dry climates are better than warm, moist ones. It is unjust in the advocates of low climates not to consider the *relative humidity*. Is the comparison of high and low altitudes by the relative humidity of each, temperature being accounted for, fair? As to the *diathermacy of the air*, the conditions for the greatest benefit from the direct influence of the sun grow more favorable with increasing elevation. He then considered the influence of *electric tension, ozone, etc.*, their increase in high altitudes, peculiar effects, and great utility. In analyzing the subject of altitude, he remarked upon the conditions of respiration. Influence of lessened atmospheric pressure upon the circulation and animal economy was also considered. He next discussed the question, to what extent does phthisis originate above the elevation of 5,000 feet? Instances were analyzed, and the favorable conditions for preventing phthisis and lengthening the years of the naturally short lived were pointed out.

In the *treatment of phthisis*, the utility of high altitudes rests upon the *adaptability* of climate to the needs of special forms and complications of the disease, as shown by comparison of experience elsewhere. Injurious effects of great elevations, precautions, etc., were dwelt upon. He then spoke of the relation of typical cases, with analysis; inferences and conclusions. He also advised when and how to go to the Rocky Mountain slope; kind of life to lead; advantages in winter and summer compared. A partial recovery necessitates a permanent residence. The remedy of high altitude is too long delayed in the majority of instances.

Dr. Duffy, of North Carolina, spoke of the rarity of consumption in the high portions of his State. The customs of the region had something to do with this. The people led an outdoor life. He also had observed the climate of Southern California, where but little rain falls, the sky by day being cloudless, the air heavily laden with moisture after sunset, so that vegetation is sustained for long periods without rain. There phthisis is rare.

Dr. Baldwin, of Florida, had studied the subject for thirty-eight years in his own State, so far as climate is concerned. He doubted whether all the beneficial effects mentioned by Dr. Denison were the result of altitude. He had witnessed the same effects in Florida, which was submerged below the level of the sea, as regards atmospheric pressure. Consumptives get well in Florida too. It seemed that the change of climate was beneficial.

Dr. Denison, in answer to the question, If out-door life and the camping-out treatment was associated with the management of his cases in Colorado? replied that it was to some extent. Parties were formed for that purpose. They travelled by day, and slept in the open air in tents or wagons. In most cases out-door life was recommended.

Dr. Gibbons remarked that there was a danger in the way medical men looked at the matter of the climate-treatment of consumption. They were apt to pitch upon a particular climate as their favorite, and to allow themselves to be warped in favor of it. Too often they were ignorant of the climate of other places. He said the climate of California was almost absolutely dry. In the interior of the State, there is neither cloud nor fog for six months. If there is an equable climate on the face of the earth, it is that of San Francisco. He had scarcely found cases of pulmonary consumption developed there. There is no such thing as a *climate* of California; there are *climates*. He advised motion, travel and out-door life for incipient phthisis, the long sojourn in a climate that was found to suit any given case, abundant food, milk, cream, etc.

Dr. Stewart, of Minnesota, spoke of the dry, cold atmosphere of his State. He instanced cases which have been restored to health by a residence there, but thought it no place for persons unable to take out-door exercise.

Dr. Johnson, of Illinois, said he had known consumptives go to Denver, Colorado, Florida, to the mountains of North Carolina, Georgia, Tennessee, to the south of France, and each came back enthusiastic about the beneficial effect of his change of climate. Altitude could not be regarded as of itself curative. He believed that in the earlier stages of the disease patients were benefited by going to the mountains, but that when softening had set in, and cavities existed, it would be hazardous for them to do so. A warm, mild climate was then to be sought.

Dr. Hare, of London, had often advised long sea-voyages, and had seen his patients benefited thereby. Vast improvement had followed a voyage from England to Australia and back in cases under his observation. He called attention to the fact that phthisis existed in some of the high valleys of Switzerland, while it was unknown on the mountains of the same altitude where there is plenty of fresh air and longer hours of sunshine. High altitudes are good when the patients can take exercise; when they are feeble, he generally recommends a southern, genial climate. He protested against the use of alcohol, and said that in his country the alcoholic treatment of consumption had occasioned increased drunkenness among both men and women

in all classes of society. The advice, "take a little wine or a little whiskey," had been the cause of no end of disease, no end of misery.

Dr. Henry MacCormac, of Belfast, Ireland, through the Secretary, presented a paper on **The Open-Air Treatment of Consumption**. The paper contended that all tubercular deposits, no matter where situated, are ascribable to habitual respiration of air already breathed, proof being given to the writer's satisfaction, from observation and chemical analysis. He said that tubercle is only the effete waste of the animal organism; when effete tissue is not oxidized it is not expelled as carbonic acid. No other theory, no other treatment than open air, was, in his view, tenable. Drs. Edge, Maddin, of Tennessee, and Davis, of Chicago, took part in the discussion of the paper.

The Section recommended the publication of the paper, but without an expression of opinion on the question involved.

A paper on **The Treatment of Simple Ulcer of the Stomach** by Dr. H. Lebert, formerly Professor of Clinical Medicine at Zurich and at Breslau, was read by its translator, Dr. Chas. W. Dulles, of Philadelphia.

Dr. Scott, of Ohio, said that he had long been in the habit of following in the main the line of treatment marked out by Prof. Lebert in this paper. His plan consisted chiefly of giving the stomach rest by means of nutritious enemata, with opium or morphia; later, a bland and most carefully regulated diet. In feeding by the rectum, too much must not be required of the bowel at the start; the injections should be small at first. One case under his observation had subsisted thirty-one days without the introduction of food into the stomach. When enemata were found to be insufficient, he recommended the subcutaneous injection of concentrated nutriment, such, for example, as Valentine's meat juice, of which one or two fluid drachms might be introduced and left to be absorbed. He had not seen ulceration follow this procedure.

Dr. Hare, of London, had not found the disease so common as to justify the use of such expressions as "frequently used," "often successful," and so on, which abounded in the paper. He believed the disease to be comparatively rare.

Prof. Stillé alluded to an English author, Brinton, who stated that ulcer of the stomach was very common in London. His own experience led him to think it so in this country. During one summer that he had spent at Lake George, no less than four cases of simple ulcer of the stomach had come under his observation. Condensed milk, as used in this country for infants, seemed to him an important article of diet in the management

of this disease, and he expressed surprise that it had not been mentioned in the translation. Food warm, or at the ordinary temperature, was often not well borne, whatever its character; it often could not be retained; oftener was not digested. In such cases, ice-cold food frequently agreed very well; indeed, sometimes could alone be taken. This fact was the more remarkable, since it must of course speedily rise to the temperature of the stomach.

Drs. Yeoman, of Canada, O'Hara, of Philadelphia, and others regarded nitrate of silver as a valuable remedy in the treatment of the disease.

Dr. R. P. Howard, of Montreal, read a paper on **Progressive Pernicious Anæmia**, of which the following are the conclusions:

1st. The various forms of anæmia may occasionally take on progressive and pernicious characters. 2d. Such is frequently the case with anæmia of pregnancy and parturition; the converse is true of sclerosis. 3d. A distinct variety of anæmia, having etiology and pathogeny peculiar to itself, "progressive pernicious," is not proven. 4th. Neither spleen nor lymphatic glands usually present any, much less any special lesion in pernicious anæmia. 5th. It remains to be proved that hyperplasia or other change of the bone marrow is a cause of anæmia. 6th. If it be a cause, it has yet to be shown whether it is the cause of a variety that should be especially styled pernicious and progressive, the weight of evidence appearing to be opposed to it. 7th. It is premature to regard pernicious anæmia as a myelogenous pseudo-leukæmia. 8th. Pernicious anæmia is perhaps rather more frequent in females than in males, but the difference is not very great.

Dr. Davis, of Chicago, was disposed to hold in entire abeyance the view that there is a special disease called "progressive pernicious anæmia." In one case, in which no *post mortem* was obtained, the blood, on examination, showed a very few red blood corpuscles, with an abundance of white ones. But there may be a class of affections in which the blood is materially changed. The office of the red cells is not perfectly understood, and therefore we cannot appreciate the disease.

On motion, the paper was referred for publication.

Dr. E. M. Hunt, of New Jersey, presented a paper on **Alcohol in Its Therapeutic Relations as a Food and Medicine**. The conclusions were:

1. Alcohol is not shown to be a definite food by any of the usual methods of chemical analysis or physiological investigation.

2. Its use as a medicine is chiefly that of a cardiac stimulant, and often admits of substitution.

3. As a medicine it is not well fitted for self-prescription by the laity, and the medical profession is not accountable for such administration, or for the enormous evils arising therefrom.

4. The purity of alcoholic liquors is in general not as well assured as that of articles used for medicine should be. The various mixtures, when used as medicines, should have definite and known composition, and should not be incharged promiscuously.

The paper was referred for publication.

Prof. Rudnew read a paper on **Sclerosis of the Vessels of the Lung**, by Dr. Beresnewitsch, of the Institution of Pathological Anatomy at St. Petersburg. The atheromatous process has been described by some writers, as affecting branches of the lung arteries, with heart complications, or, when the lungs are themselves affected, with atrophy or emphysema. Dr. B. argues that emphysema was the sequence rather than the cause. His inquiries, based on microscopical investigations, are: 1. What arteries are directly affected, whether bronchial or pulmonary? 2. Under what conditions is the disease generated? Dr. Isaacson has found it was always due to an affection of the lung-vessels. Dr. B. describes the changes which take place in the blood vessels, and ascribes much of the destructive action to syphilitic infection in the capillaries, and afterwards in the larger arteries. Sclerosis is due to development of connective tissue, between the layers of which the coating consists. The paper was referred for publication.

SECTION ON BIOLOGY.—Dr. Christopher Johnston, Prof. of Surgery in University of Maryland, made a report on the *Microscopy of the Blood*, in which it was stated that there are two varieties of fish which have circular red blood-corpuscles.

The paper was descriptive, and no conclusions were presented.

The Excretory Function of the Liver.—The conclusions of the reporter, Dr. Austin Flint, Jr. Professor of Physiology in Bellevue Hospital Medical College, were as follows:

Cholesterin exists in health in the bile, the blood, and nervous matter; also in the crystalline lens, in the spleen and in meconium. It is found for the most part in nervous matter, from which it is passed into the blood. The blood gains cholesterin in its passage through the brain. In old cases of hemiplegia, there is no cholesterin in blood taken from the arm of the paralyzed side, while it exists in the blood from the sound side. Its formation is constant, and it is always found in the blood. It is separated from the blood by the liver and is discharged with the bile. It pre-exists in the blood, serves there

no useful purpose, and if it is allowed to accumulate, blood poisoning results.

The bile has two separate and distinct functions, to which the so-called biliary salts, glycocholate and taurocholate of soda, contribute; these do not exist preformed in the blood, but are the products of secretion. The second function of the bile is excretion with depuration, this being accompanied by removal of cholesterolin, which it obtains from the blood. Normal fæces do not contain cholesterolin. The latter is represented by stercorine, formerly called seroline, into which it becomes converted in its passage down the intestine. The conversion of cholesterolin into stercorine does not, however, take place when digestion is arrested or when it is not necessary, as is shown by the presence of cholesterolin in its own form in the fæces during fasting, and in the meconium. The difference between the two varieties of jaundice—one mild, the other severe—is dependent upon obstruction of the bile ducts in the one instance, with reabsorption of biliary coloring matter, while in the other there is retention of cholesterolin in the blood, in consequence of destruction of the parenchyma of the liver.

That condition of the blood dependent upon the presence of cholestherine in the blood Dr. F. calls *cholesteræmia*. It is characterized by symptoms referable to the brain, and may or may not be attended with jaundice. Cholesteræmia does not occur in every disorder of the liver, because even when a part of the organ is disordered, there may remain a portion still capable of performing the function of excreting cholesterolin. In case of simple jaundice, even where fæces are decolorized, there is an accumulation of cholesterolin in the blood. Cholesterolin bears the same relations to the liver as urea does to the kidney.

The Mechanism of Joints.—Dr. Harrison Allen, Professor Comparative Anatomy University of Pennsylvania, the Reporter, starting with the idea that joints are of dynamic and static values, showed that in most movable joints the ball and socket arrangement predominates. When the ball is supported by the socket, as at the occipito-atloid articulation, *rest* is suggested. But when the ball is suspended from the socket, as at the temporo-maxillary articulation, *motion* is suggested. He illustrated the etiology of fracture and dislocation by reference to this method of study. It was premised that articular surfaces are of three kinds: *axial*, *actinic* and *lateral*. The *axial* or primary surfaces are those situated upon proximal and distal ends of a bone in the line of its longitudinal axis. The *actinic* or secondary (rarely seen) are those placed in a line which is deflected from the longitudinal axis. The *lateral* or tertiary are

those situated upon the sides of the shaft or body of a bone and serve for articulation with corresponding surfaces of other bones. Thus, the outer femoral condyle is *axial*, since it is placed in the line of the longitudinal axis of the femur. The internal femoral condyle is *actinic*, since its line intersects the long axis of the femur, from which it may be said to be deflected. The *lateral* facets of the metatarsal or tarsal bones serve to illustrate the lateral kind.

Axial surfaces, it is believed, are static; actinic surfaces are dynamic; while lateral surfaces have subordinate degrees of value—some of them being adventitious. The outer femoral condyle is active in extension, *i. e.*, static; the inner femoral condyle is active in flexion, *i. e.*, dynamic; but the lateral facets have no independent action. Joints are fixed or locked at extremes of flexion and extension, and are most relaxed at the intervals between these extremes. An application of these premises was made to the etiology of dislocation. It was assumed that when a facet is actively employed it enters into a combination with which the entire limb is in harmony. Hence, in the study of any one facet, its relations to all others of its kind, as well as to the bones, muscles and fasciæ of its limb, become essentials. It was shown, in conclusion that a correct knowledge of the symptomatology and treatment of diseases of the joints is dependent upon a true conception of the complex nature of articular surfaces.

SECTION ON SURGERY.—Antiseptic Surgery.—The Reporter, Dr. John T. Hodgen, Professor of Surgical Anatomy and Clinical Surgery in St. Louis Medical College, maintained: (1) Putrefaction may and does occur in the solids and liquids of the body, both with and without the direct contact of germs borne in the air or water. (2) Putrefaction of the solids and liquids of an open wound may, in many cases, be prevented if the contact of living germs with the surface is not permitted; or by destroying their vitality after contact with it. (3) It is possible that the living solids and liquids of the body may be so altered that they shall not furnish the condition necessary to putrefaction. (4) Practically, the conditions to be met in preventing putrefaction are so difficult that in many cases it is impossible to comply with them. Yet, even partial success is eminently worthy of our best efforts.

In discussing these propositions, Dr. H. said that, in septiciæmia the blood contains elements of putrefaction, which elements are derived from fluids. Absorption, as asserted by Billroth, takes place most readily in the early stages of inflammation, and in recent wounds. Diseased skin and wounded surfaces

take up the matters readily; yet the latter do not pass through healthy granulations. This has been proved by experiment. Putrid pus is found in abscesses in many parts of the body. A destructive inflammation may originate in these collections; the surrounding walls of the cavities may melt away, and septicæmia, following a large flow of putrid pus, is probably due to fresh inflammation in the walls of the abscess. Debility, fatigue, and the like, induce these changes.

Animals fed on sulphites are not so liable to septicæmia as animals otherwise fed. Any substance that arrests putrefaction is antiseptic. Cotton as a dressing is not reliable, because we cannot be sure that it is free from bacteria. Heating the wool or diffusing gases through it (Lister's method) may free it from germs. Charcoal, clay, chalk, Peruvian bark, and pulverized madder-root, are all useful, but not absolutely sure. Caustics destroy the living organisms upon which putrefaction depends. Currents of dry air, by desiccating the fluid from wounds, prevent the absorption of putrefying matter. Practice shows the necessity of great care in protecting wounds. We should prevent the entrance of bacteria by plasters, powders or fluids. If we can keep septic matters within bounds, we prevent septicæmia. We see this in washing out wounds or inflamed uteri.

The antiseptic ligature cannot be ignored. It becomes absorbed and organized; Lister says that we really surround vessels with living animal tissue. Epithelial cells, as is well known, after removal from their place of origin, can proliferate. Why, then, cannot animal ligatures revive and become organized when around vessels?

Dr. Paul F. Eve uses the tendons of the deer. They become absorbed. The entrance of septic germs may be prevented, but only for a time. Actual prevention requires such exact care as will be seldom seen. The fact that germs have been found under dressings so ingenious as those of Lister, shows how nearly impossible it is to prevent their contact with wounds. Experience teaches that, as Billroth asserts, absorption by granulating surfaces does not take place rapidly enough to cause septicæmia. It takes place *before* granulation begins. Drainage tubes, water baths, and other rapid means of cleansing wounds, will prevent absorption.

Dr. Hewson, of Philadelphia, related his experience with the earth treatment, with which he has been very successful. He thinks water dressings convey germs. For ten years he has not used ligatures, but acupressure and torsion, and thus one source of putrescence is avoided. Dr. H. removes dressings as infrequently as possible, and covers wounds with blue paper to ex-

clude rays of light. During the past few months he has used salicylic acid, but has not allowed wounds to be washed, nor dressings to be disturbed when not soaked by the discharges. At present, he finds nothing so satisfactory as salicylic acid. He finds, too, that it relieves pain.

Prof. Lister next spoke for three hours. He first referred to the great trouble which attends a perfect use of the antiseptic method; but expressed his honest belief that there did not exist a medical man who would not be faithful in carrying out any form of treatment which promised to help a patient. He described an operation by which he recently cut out large, wedge-shaped pieces from the two femurs of a cripple in order to straighten his limbs. To do this without strict antiseptic treatment would make success impossible.

Referring to wounds on the head, he said that to remove dressings after days in which they were left untouched, and to find no pus, but fresh cicatrices, was a new era in surgery. To open the spine, remove carious bone, and restore the patient to health; or to open an acute abscess, press out the last drop of pus, and see no more form, can only be accomplished by the antiseptic method. Unless we use this method, we cannot safely tie large arteries without deep-seated suppuration. We need have no hesitation in expressing the belief that although we may have good healing without antiseptic treatment, we cannot thus secure the best results. Antiseptic surgery is dealing with surgical cases in such manner as to prevent putrefaction. "When I read," said he, "Pasteur's original paper, I said to myself, 'Just as easy as we may destroy lice in the head of a child who has pediculi, by poisonous applications which will not injure the scalp, so, I believe, we can use poisons on wounds to destroy bacteria without injuring the soft tissues of the patient.' Putrefaction may be caused by an individual himself because of his feeble condition. In simple fractures, even, we have serious wounds. If we could only see it, we should say, 'Here is dead tissue. It must be poulticed to help its removal.'"

If injury follows the opening of an abscess, it is not due to the admission of matter from without, but to the effect upon the pyogenic membrane, which gives it power to absorb, as it did not when intact. So says Billroth. But we did not need to have Billroth tell us that granulations do not absorb, and that putrescent absorption occurs before granulation. "I said this years ago. We all know how when water dressings are removed from granulating surfaces, the whole ward will stink, and yet the granulations do not absorb. The cause of the mischief in the free opening of abscesses without the antiseptic treatment

is that the pyogenic membrane is not in a condition of granulation. But in acute abscesses we have a granulating surface, just as we have in recent wounds. It is not so in chronic abscesses. Many abscesses do not form pus at all until they are opened. They are not then in a condition of granulation; but in consequence of their chronicity, they can absorb. Granulations covered by epithelium develop in proportion to the amount of epithelium. In pyogenic membranes the surface will absorb in proportion as it resembles a sore with the granulations stripped off. I have seen a patient die within twenty-four hours (before the membrane had had time to granulate) by absorption of putrescent matter; and although the discharge was clear, and not yet pus, it stunk."

Prof. L. then showed his common and most reliable dressing. He uses carbolic acid, perfectly pure. That which makes carbolic acid unpleasant to the smell is cresylic acid. "If a solution of water and acid be not clear, the cloud is caused by insoluble carbolic acid, and this portion will irritate the hands if rubbed upon them; but a perfectly pure solution will not do this. Carbolic acid has the property of penetrating through many, even oily substances, and will cleanse more perfectly than anything else." He likes salicylic acid, but prefers carbolic acid because more volatile, and hence more searching. He then showed his ingenious spray producer, which is so arranged that the spray can be directed at any angle upon a wound without the need of an assistant. He begins his dressing by first requesting his patient to cleanse the injured part by washing. He used to excise the carpus. Now he does not like the operation. In case of injury in which there is great mobility of the wrist, he makes two or more free incisions into the joint, keeps the wound open, and uses a drainage tube, with good results. The finger-nails should always be cleaned before the hand or finger is introduced into the body. Be sure not to introduce anything into the wound not cleansed by the carbolic acid lotion of one part of acid to twenty of water.

Mr. L. uses a coarse netting dressed with a mixture of carbolic acid, one part to five parts resin. He first lays upon the wound a piece of oil silk well varnished with copal varnish, and wet in the carbolic acid lotion. He does not use this in opening abscesses, because he does not wish them to heal. If the gauze went first upon the wound it would irritate and cause a flow of pus, but if the oil silk be first laid on, we may leave the dressing for a week. If, during an operation, an instrument be laid on the table, it should not be again used until it has been dipped into the carbolic acid lotion. The gauze is next laid on, first

being dipped into the carbolic acid lotion. The remainder of the dressing, already prepared of layers of calico, oil silk and wadding, must not be laid on without first protecting it by gauze dipped into the lotion, because, having been lying upon the table, it may be covered with germs. All this is done under the spray; and when the dressing is changed it must be done under the spray, and one must see that this plays between the dressing and the skin of the patient. The whole is bound on by a roller of silk gauze moistened in the solution.

Mr. L. then explained his own experiments and those of others with milk, water, urine and other fluids, variously protected from bacteria by covers, or by boiling. He showed how germs may find entrance into fluids, and how these fluids may be protected from them. In regard to bacteria found in freshly voided urine, he believed that a healthy mucous membrane in the urethra prevents the development of bacteria. In lesions of the membrane, if it be washed by a solution of water and carbolic acid, and the penis be washed in the solution and a cap soaked in the solution be put on, the urine will not change in any respect. He then described his catgut ligature, and his method of preparing it. He at first tried chromic acid, but that substance made the ligature too hard. He then tried glycerin, chromic acid and water; next, chromic acid and carbolic acid; now he uses chromic acid, glycerin, water and spirits of wine.

Prof. Gross then said that for years he has prevented irritative fever in patients who had chronic abscesses, without the antiseptic method, by putting them at once under the influence of anodynes, and keeping them thus for several days.

In reply to a question as to the use of the antiseptic treatment in abdominal lesions, Mr. L. mentioned a case in which the bowel protruded and lay outside the cavity for half an hour, covered with a cloth dipped in the carbolic acid solution. The bowel was returned, and there was not the slightest disturbance of the peritoneum. He himself never did ovariectomy, because there was an ovariectomist in his hospital; but all of his six colleagues, with one exception, employed the antiseptic treatment as carefully as he himself, and their success is in proportion to the amount of care they use.

He explained away the report that bacteria had been seen under his dressings. The report was started by Ranke, Volkmann's assistant in Halle, who thought he had discovered bacteria; but when Ranke came to Edinburgh, Mr. L. showed him that the supposed bacteria were only a microscopical illusion, caused by movement of the fluid in the field of the microscope, which movement was communicated to particles of inanimate matter which resembled bacteria. Ranke confessed his error.

After the discussion, the Section voted that it was unable, in the present state of the subject, to come to any distinct conclusion in regard to the antiseptic method.

Treatment of Coxalgia.—The Reporter, Dr. Lewis A. Sayre, Professor of Orthopædic and of Clinical Surgery in Bellevue Hospital Medical College, after describing coxalgia, divided the disease into three stages. After giving the diagnostic symptoms, and the pathological changes in the joint of each of these stages, he remarked in reference to the etiology of the disease, that it may occur in *any* person from a sufficient exciting cause. The disease is almost peculiar to childhood, because this is the age of reckless indifference. It is not of necessity of scrofulous origin. It is almost always of traumatic origin, and not necessarily connected with vitiated constitution.

Proper treatment, in the majority of cases, will result in recovery with good or perfect motion, and without deformity. *Rest* and freedom from pressure of *the parts* involved, while at the same time the rest of the body is allowed free exercise in the open air, and a nutritious diet, is the best treatment that has yet been devised for this disease. If this plan of treatment is adopted in the early stages of this disease, the majority of cases will recover with nearly, if not quite, perfect motion, and without deformity. In the advanced *second* stage, when absorption cannot be produced, it is better to puncture or aspirate the joint and remove its contents than to leave it to rupture by ulceration.

In the third stage, when the treatment recommended has been properly applied without satisfactory improvement, but progressive caries continues, then *exsection* of the diseased bone is not only justifiable, but absolutely necessary. The operation of exsection of the hip is easily performed, and attended with no danger. After exsection of the hip-joint in cases of caries, the recovery is much more rapid and certain, and infinitely more perfect as to form, motion and the usefulness of the joint and limb, than when left to the slow process of nature's exfoliation.

Dr. Gross opened the discussion. He could not agree with the second conclusion of Dr. Sayre's paper (that coxalgia is almost always traumatic in origin, and is not necessarily connected with a strumous constitution). He always asks, "Has this child received a blow, a fall, a contusion?" The general answer is *No*. We are safe in saying that inquiry in the majority of cases would thus result. Doubtless coxalgia is sometimes the result of injury, but not necessarily so. Coxalgia *cannot* occur in a child not laboring under constitutional degradation. It is as impossible as the occurrence of consumption without a forerunning debility. In case of abscess, what is the

character of the pus which follows the knife? Manifestly it is strumous, like the sputa of phthisis. Turning to Dr. Sayre, Dr. Gross asked, "Have you ever seen any other kind of pus issuing from a diseased hip-joint?" "No," replied Dr. Sayre. "That settles this point, then, and shows the constitutional condition of the patient. It occurs at the hip-joint, because that is the weakest part of the child, or it arises because of suppression of cutaneous perspiration. It may be hereditary. One or more members of the patient's family will be found to be consumptive, to have had caries of the spine or of other bones or a syphilitic taint. I maintain that the part is in a predisposing condition. Unless this predisposition exists, I believe coxalgia not liable to arise."

Dr. A. C. Post, of New York, thought the Reporter spoke too strongly in saying the operation of such magnitude as excision was without danger.

Dr. Campbell, of Georgia, believes coxalgia is frequently due to traumatic cause; but the fall or injury would *never* have caused the disease in a healthy child. Scrofula is invariably present. It is a manifestation of general vice of constitution. He fully agrees with Dr. Sayre in his objection to too early operative interference; he cannot agree with him in regard to coxalgia in healthy children. It is a manifestation of constitutional taint, syphilis or scrofula.

Dr. Hingston, of Montreal, said it is difficult to depart from early teaching. Until within 12 years, he believed that coxalgia was strumous. Since then he has changed his opinion. In 29 cases collected by him, he traced 26 to traumatic injury. In 6 children of the same parents and grandparents, one becomes afflicted with coxalgia; not the unhealthy child of the six, but the healthiest—the child who is most active in climbing, falling, etc. So soon as this child can run about without aid, it takes care of itself; but before this, from its activity, is apt to fall and become injured. Is the cause traumatic or constitutional? If traumatic, what need of constitutional treatment? if constitutional, what need of surgical appliances?

Dr. Moore, of New York, has the firm conviction that this particular joint becomes affected because it is small in comparison with other joints, as the knee or the ankle. It is not much larger than the elbow or shoulder-joint, and much more exposed to strain, and is gripped by big muscles, which, in case of injury, become rigid, thus holding the joint almost immovable. He does not believe in hereditary taint. He thinks Pott's disease is a cause, not a symptom, of consumption.

Dr. Gross said laudable pus could never have come from true morbus coxarius. It was always curdy and flaxy.

Dr. Hunter McGuire, of Richmond, Va., said that Dr. Gross had taught him twenty years before that scrofula could be acquired—that heredity was not necessary. It was true that laudable pus, in his opinion, was never seen in coxalgia, because by the time suppuration had set in and the second stage of coxalgia was reached, scrofula, or a condition similar to it, was produced by the pain, irritation, loss of appetite, &c. It did not follow because the patient had scrofulous pus that the origin of the disease was strumous. It was true, scrofulous children were more liable to it. If the disease was constitutional, why was it often cured by local without constitutional means?

Dr. Pooley, of Ohio, believes that coxalgia is never connected with struma, save by accident of occurrence.

Dr. Grant, of Ottawa, has opened an abscess from coxalgia, and the pus was laudable. He does not believe in its strumous origin.

Mr. Adams, of London, believes coxalgia has a traumatic origin, and that it is an affection of the round ligament. We seldom see recent coxalgia in *post mortem* cases, but Axel Key found the round ligament (*post mortem*) slightly inflamed and some serum in the joint. In another case similar conditions were found, but no bone disease. There may be two causes of coxalgia; (1) irritation and inflammation of the round ligament; (2) bone disease.

Dr. Agnew, of Philadelphia, believes it probable that a slight injury from a fall, a trip, a twist of the joint, generally starts the inflammation; but behind and beyond all, there is constitutional taint.

Dr. T. G. Richardson, of New Orleans, believed the disease was always scrofulous in its origin, and never occurred as a simple traumatic injury. If of traumatic origin, why did we not have it following luxation of the head of the femur, etc.? He said the age of "recklessness" was not the age in which it was most prone to develop.

Dr. Brodie, of Detroit, thinks the disease starts in the cartilage, and develops therefrom.

Mr. Lister, of Edinburgh, said that whether the disease be constitutional or not, has no bearing on the treatment. Take a case of cancer. We admit it to be constitutional. If removed by operation, even the local manifestations disappear. How many patients there are who live to be healthy after struma of the cervical glands! If we admit scrofula at all, we must admit that it exists in coxalgia. As to the efficacy of treatment, in Edinburgh we make cures in the majority of cases.

Dr. Sayre asked, If there be constitutional taint, how do we

cure by rest and local treatment without a grain of medicine? How do we cure without constitutional treatment? He then quoted a case in which, six years ago, he performed exsection on a girl whose joint had suppurated for years, and whose life was at the very lowest ebb. The case recovered perfectly without taking a particle of medicine. In answer to the question, Why is there sometimes congenital luxation of the femur without coxalgia? he said that he did not believe there ever was a case of congenital luxation, and thought the term a misnomer. The apparent luxation was only a lack of development of the head of the bone.

Dr. Sayre's propositions, except the second, were finally accepted.

Dr. J. W. S. Gouley, of New York, presented a report of a case of **Subperiosteal Excision of the Entire Inferior Maxillary Bone**, and solicited the records of unpublished cases to add them to those he has already collected for analysis in an essay he is now preparing. The Doctor's patient was a female 19 years old, with a phosphorus necrosis of four years' standing, involving the entire lower jaw. She was greatly disfigured by a very large under jaw, made up of an enormous involucrum, rendering mastication impossible. March 19, 1864, the patient having been etherized, the entire jaw was removed by external incision, and she made an excellent recovery. When last seen, seven and a half years after the operation, the bone reproduction extended from the body to the rami of the jaw. It is not common in phosphor-necrosis to find an involucrum, but in his case there was one, while there was none of the pumice-stone deposit of Stanly. He explained this by the violent phlegmonous periostitis which occurred a year previous. As regards various operations, chiefly modifications of the external incision, he wished particularly to call attention to the intrabuccal, which offers many advantages. The operation for removal of the lower maxilla was usually accomplished at two or more sittings, but in his list he included as one all which were merely continuations of the same.

Dr. Hutchinson, of Brooklyn, said in malignant tumors he should consider the intrabuccal operation as an unsafe one; there would not be the same certainty of complete removal; but for phosphor-necrosis he considered it perfectly feasible and easy. It was also applicable to removals of the superior maxilla.

Dr. Hyde said the incision must depend largely on the requirements of the case. He had usually removed sequestrum from the inside.

Dr. Gouley, in reply to a question by Mr. Lister, stated that

the bone was entirely dead, and should have been removed two years earlier.

Prof. Lister thought the incision should be determined by the tumor. He certainly would not employ the intrabuccal one in malignant cases, but might in innocent ones; although even here in males the scar could be well concealed, and even in females was not serious if made behind the ramus.

Mr. William Adams, President of the Medical Society of London, read a paper on **Subcutaneous Division of the Neck of the Femur**. He had collected all the published cases—23 in number (5 by himself). From the good results attained, he should be prompted to do it in well-selected cases when the deformity is inconvenient, as there had been but one death, and that in an unfavorable case. He showed the necessity of careful watching during the treatment of all hip diseases or injuries. The straight position in one case prevented the patient sitting on a chair, and also debarred her from emptying the rectum save while standing. The operation is very simple, the soft tissues being pierced down to the bone, the periosteum divided or scraped away, and the saw carried down along the blade of the knife, it being carefully noted that in sawing the cut should be made at right angles with the longitudinal axis of the neck. The saw is blunt-pointed, very robust in the handle, and with cutting edge just as long as the diameter of the bone, that no damage be done to surrounding tissue. About two or three minutes usually severs the bone. When the head and neck have disappeared, the section may be made through the trochanter minor. Extension is applied by weight and pulley, and passive motion instituted at the end of first week. His conclusions were: 1. That bones can be divided subcutaneously, the same as tendons. The operation is a well-established one, and the cases almost uniformly do well. 2. Long bones can be divided subcutaneously at any point with little risk. 3. In a large number of cases the operation is followed by but little irritation, and there is seldom pain or suppuration. 4. In some there is slight suppuration, but not serious, and in one case there was death from pyæmia. 5. The operation usually corrects the deformity, though ankylosis in the more favorable position may occur. In some cases motion has remained for a time, and in one case as long as three years.

Dr. A. C. Post related a fatal case in which gangrene set in, found subsequently to be due to the femoral artery and vein being hooked on the stub end of the bone. Subcutaneous division of the neck within the capsule would avoid this and other dangers.

Mr. Adams said that about half the cases of ankylosis were the results of coxalgia—the other half pyæmia, rheumatic or traumatic. He always avoided scrofulous cases if possible, as they often did poorly.

Dr. Servias, of Belgium, advocated fracture of the bone by brute force, under the view that the weakened point was just below the trochanter minor, and it would first give way at this position—the point selected by Mr. Adams in cases where the head and neck had been destroyed. The advantage claimed was, that only simple fracture remained to be treated.

Mr. Adams replied that though he had several times broken femurs accidentally, he feared direct force would not be reliable as to the exact position.

Dr. McGuigin, of Iowa, claimed to have successfully performed subcutaneous section of the neck of the femur with the chain-saw, twenty years ago.

Prof. Jos. Pancoast, of Philadelphia, stated that Dr. Rhea Barton did not remove a triangular piece, as reported; he simply sawed through the bone.

Prof. Sayre spoke of two cases he had already reported, and said he was decidedly in favor of Mr. Adams' plan, and should hereafter adopt it when feasible, as it was far more simple. He suggested that extension be made after the operation at once—not waiting, as Mr. Adams had said, for three or four days. Mr. Adams' report confirmed his previous suspicion that ankylosis was likely to occur subsequently, though Dr. Post had a case in which good motion was secured.

Dr. Richardson, of New Orleans, related a case in which he accidentally broke the neck of the humerus in attempting to reduce an old luxation. He placed the broken end in the axilla, and secured a good, movable joint.

Mr. Adams said it had been his intention in the future to apply extension immediately, and to enforce passive motion under chloroform every week.

Prof. Pancoast favored the subcutaneous boring and fracture of the bone.

Prof. Lister said in two cases after exsection of the neck of the femur, he had applied too great extension, and prevented union.

Prof. L. A. Dugas, of Georgia, read a paper on **Penetrating Wounds of the Abdomen**. Penetrating wounds have hitherto been considered very fatal, and peritonitis assigned as the cause, and all treatment directed to it. Fatal termination usually takes place in 24 to 60 hours at most, but no process of inflammation with which we are acquainted proves fatal in that short

time. He thinks fatal results are due to septicæmia, and not to inflammation, and treatment should be directed to prevent that, by laying open the abdomen, cleaning surfaces, stitching wounds of intestines, if any, ligating vessels, etc. By opening the abdomen early, we can examine and detect lesions of intestines or vessels; the wound cleansed can thus be reduced to its simplest expression.

Dr. Moore, of Rochester, said death not infrequently occurred in 24 hours with unmistakable evidences of peritonitis.

Dr. Campbell, of Georgia, heartily agreed with the writer's conclusions, and believed it would be much better in cases of concealed hæmorrhage to lay open the abdomen, search for the bleeding vessel, wipe out blood clots, and close tightly.

Prof. Lister remarked that the experience of ovariologists proves that even a cut at the linea alba is devoid of danger.

Dr. Fred. Hyde, of Cortland Village, N. Y., read a paper on **Opening the Sac in Herniotomy**. After giving a résumé of the usual methods of herniotomy, he said division of the sac is often necessary. Experience in Petit's, or the minor operation, proves that the cases which are most successful are those which furnish most favorable results with division of the sac. The objection that it exposes to peritonitis is refuted in the greater danger of returning the contents of the sac, with their average morbid state, into the abdomen. The objection that opening the sac exposes to air, light, temperature, etc., is no weightier than in ovariectomy and other abdominal operations.

Prof. Joseph Pancoast remarked that the procedure, though undoubtedly proper in many cases, is very frequently unnecessary. In several cases of old, large herniæ, he had divided the strictures by a simple subcutaneous incision of the constricted points.

Dr. Post said the views of the essayist, if followed out to analogous conclusions, would tend to prove that Cæsarian section was preferable to a normal delivery. In some cases, the sac should undoubtedly be opened, but in others there was no more reason for doing this than in refusing to attempt taxis for fear of some already existing lesion of the bowel.

Dr. Addison Hewson, of Philadelphia, read a paper on **Anæsthesia, as Produced by Nitrous Oxide and Rapid Breathing**. The method had been suggested to him by W. G. Bonwill, a dentist of Philadelphia, and he had tried it in a number of cases, with varying but satisfactory results. The method pursued was to cause the patient to breathe from forty to fifty times in the minute, the effect of which in from three to five minutes was a tingling of the surface, with flushed face. Consciousness remained

unimpaired, and the patient would perform any act desired, but was rendered totally devoid of sensibility. This method would be advantageous for short, minor operations, especially those about the nose, throat, etc. The process occupied a longer time in young people, and in cold weather. He explained the theory of its action by the retention in the blood of carbonic acid.

Causes and Geographical Distribution of Calculous Disease.

The Reporter, Dr. Claudius H. Mastin, of Mobile, Ala., being unable to attend the session, forwarded his report, which was read by Dr. H. Lenox Hodge. After briefly noticing the varieties and constituents of calculous concretions, he named as among the *probable* causes: (1) Hereditary influences which control a diathesis. (2) Digestive troubles, induced by an excess or deficiency of proper diet. (3) Sedentary life, with indulgence in stimulating food, by which healthy nutrition and assimilation are altered to mal-assimilation and mal-excretion. (4) Climatic changes, deficiency of clothing, and an arrest of the healthy function of the dermoid tissue. (5) Want of harmony between the great secreting and excreting organs of the system—the liver, skin and kidneys—with catarrhal affections of the uropoietic viscera, favoring the formation of a colloid medium. (6) Injuries of the spinal cord, from which a proper nervous influence over the mucous membrane of the urinary organs is lost; foreign bodies introduced into the bladder, producing cystitis, with its consequent muco-purulent discharge, from which the phosphates are precipitated.

In reference to hereditary influences, he takes the ground that gouty and calculous diatheses are nearly akin—one being the result of an excess of urate of soda in the system, the other dependent upon an undue proportion of uric acid; he tries to prove that they are two different phenomena springing from one and the same root, and that consequently the causes which produce the one must influence the other.

Owing to want of time, he confined his remarks to the geographical distribution of calculus in America.

Medical and Surgical Treatment of Aneurism.—The Reporter, Dr. Wm. H. Van Buren, Professor Principles and Practice of Surgery and of Clinical Surgery in Bellevue Hospital Medical College, after glancing at the causes of aneurism and the sources of information at his command, rapidly enumerated the several modes of treatment at present in use, and endeavored to estimate the remedial value and especial applicability of each. Incidentally, the following mooted questions were touched upon: (a) Why blood coagulates so much more promptly in some cases of aneurism than in others where conditions are apparently

alike; (b) the value of antiseptic treatment in securing quick union of the wound after applying a carbolized catgut ligature for the cure of aneurism after the Hunterian method; (c) the propriety of employing the carbolized catgut ligature upon a large artery; (d) the value of the "constricting" ligature of silver wire; (e) the comparative value of rapid and slow pressure; and (f) the value of galvano-puncture—of coagulating injections, etc.

In the discussion which followed, Prof. Joliffe Tufnell especially recommended rest in the treatment of aneurism. He illustrated his remarks by means of photographs and prepared specimens.

Prof. Lister remarked that the question was not so much as to whether an aneurism was idiopathic or traumatic, as to the amount of danger involved in surgical interference. If an aneurism were traumatic, we at once cut down upon and ligate the artery, knowing that no matter where we ligate the vessel will be healthy. On the contrary, in idiopathic aneurisms, we may have an artery which will not bear a ligature until we have dissected far up or down its continuity. In these cases, it is almost as well to do the old operation at once. He thought the old tourniquet much safer than is commonly supposed. When it produces ill effects, it has not been rightly adjusted. Syme had only one death in forty cases, and this because he used compression. Lister then described his treatment of nævi, by strangulation—the only modification being the use of carbolized catgut ligature.

Dr. John Ashhurst, of Philadelphia, said, in regard to the abdominal compression, Prof. Pancoast had not claimed the credit which belonged to him. He was too busy to publish all he had done. But he invented a compressor which antedated Lister's instrument about two years, although it was acknowledged that Prof. Lister's compressor was more perfect. Dr. Ashhurst felt that as an American he ought to claim thus much credit for a native surgeon.

Prof. Tufnell informed the section that in 1835 LeStrange, of Dublin, left his collection of surgical instruments to two colleges in that city, and that among them was a compressor, invented by LeStrange, proving that there is almost literally nothing new under the sun. But LeStrange's instrument was a simple abdominal compressor, used only in treatment of aneurism, whereas Pancoast's compressor was invented and used entirely for the purpose of cliecking and controlling hæmorrhage during operations at the hip-joint; so that a comparison of two similar instruments, which were invented for entirely different uses should not have been made.

The following conclusions were adopted by the Section :

1. Tuffnell's treatment of aneurism by rest, position, and restricted diet offers a valuable resource in thoracic and abdominal aneurisms.

2. It should always be tried in innominate, subclavian, subclavio-axillary, and iliac aneurisms, before resorting to measures attended by risk to life.

3. For aneurisms of the subclavian and iliac arteries, the Hunterian operation, with our present means of preventing secondary hæmorrhage, is not justifiable.

4. For reasons formally set forth by Holmes and Henry Lee, the "old operation" cannot properly be substituted for the Hunterian operation in these cases, but should be held in reserve for special cases.

5. It is the most safe and surgical resource in gluteal aneurism, if the circulation can be commanded by the hand *in secto*.

6. The mode of cure by embolism, aimed at in the method of manipulation, is a not infrequent explanation of what is called "spontaneous cure" of aneurism.

7. The value of Esmarch's bandage in the treatment of aneurism is probably not fully estimated.

8. In view of the promising features presented by the cases of Levis and Bryant, in which horse-hair was introduced into an aneurismal tumor, the repetition of this operation, or the substitution for horse-hair of Lister's prepared catgut or other animal substances, may be properly tried.

SECTION ON DERMATOLOGY AND SYPHILOLOGY.—Variations in Type and in Prevalence of Diseases of the Skin in Different Countries of Equal Civilization.—The Reporter, Dr. James C. White, Professor of Dermatology Harvard University, submitted a report, of which the following are the conclusions, which were adopted by the Section :

1. Certain obscure affections, the etiology of which is little, if at all understood, even in those parts of Europe to which they are mostly confined, may be regarded as practically non-existent among us. Of such are *prurigo*, *pellagra* and *exudativus rubra*.

2. Certain diseases, directly connected with, and dependent upon poverty and habits of personal uncleanness, are less prevalent in the United States than in those parts of Europe of which we have sufficient statistical information for comparison. Examples of this class are the *animal parasitic affections* especially.

3. Some cutaneous affections of grave character, which are dependent upon, or a part of serious constitutional disorders, are of less frequent occurrence and of milder type amongst us than in Europe in general, or those parts of it where they are endemic.

Lupus, the *syphilodermata*, and *leprosy* are the most marked instances of this class.

4. Certain diseases of the skin, especially those of its glandular system, and those connected more immediately with its nervous system, are apparently more prevalent with us than in Europe. The most notable examples of the former are *seborrhœa*, *acne*, and possibly the heat rashes; of the latter, *herpes urticaria* and *pruritus*.

In addition to the above mentioned conclusions is the following proposition:

5. The type of certain acute congestive and nervous diseases of the skin is more severe in this country than abroad.

Are Eczema and Psoriasis Local Diseases, or are they Manifestations of Constitutional Disorders?—The Reporter, Dr. Lucien Duncan Bulkley, editor *Archives of Dermatology*, New York, after reviewing the nature of the eruption in constitutional disorders affecting the skin, the nature of local diseases, the microscopic anatomy of the two diseases under consideration, the clinical history of these two and some local diseases, and after discussing the effect of local and of constitutional treatment, adduced the following conclusions, which were adopted by the Section:

1. Eczema and psoriasis are distinct diseases. The former is to be clearly distinguished from artificial dermatitis, and the latter from the eruptions of syphilis, scaly eczema and leprosy.

2. Eczema and psoriasis cannot own a double causation or nature, at one time local and another constitutional; but, with other diseases, may have a two-fold cause, a predisposing and an exciting.

3. Eczema and psoriasis, in many of their features, resemble the accepted constitutional diseases more than they do those recognized as local.

4. Eczema is most properly likened to catarrh of the mucous membranes; it is very probable that some attacks called catarrh are eczema and psoriasis of the mucous tissue.

5. Both eczema and psoriasis resemble gout and rheumatism in certain respects, and are dependent upon a somewhat similar, although as yet unknown, constitutional cause; much of the skin lesion must be looked upon as the local result or remains of the diseases.

6. There as yet exists no microscopical or physical proof that eczema and psoriasis are the sole result of local cell disorder, either congenital or acquired, or due alone to perverted nerve action.

7. Local causes play a very important part in the etiology of eczema. They are probably inoperative in psoriasis.

8. Local treatment is often insufficient alone to remove the lesions of eczema and psoriasis, and cannot prevent or delay relapses; its success does not necessarily demonstrate the local nature of these affections.

9. Constitutional treatment, alone and singly, can cure many cases of eczema and psoriasis, and prevent or delay relapses in a certain proportion of cases; under constitutional treatment is included every agency not properly classed among local measures.

10. The total weight of evidence and argument is that eczema and psoriasis are both manifestations of constitutional disorders, and not local diseases of the skin.

The Virus of Venereal Sores; Its Unity or Duality.—The Reporter, Dr. Freeman J. Bumstead, late Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, stated that three views as to the origin of venereal sores have been entertained: All venereal sores are due to a single, specific virus, the virus of syphilis. Some venereal sores are due to the syphilitic virus, and others to a distinct virus, known as the *chancroidal*—others to the inoculation of the products of simple inflammation, in which latter case no specific virus exists. The evidence for and against each of these suppositions, drawn from clinical experience and artificial inoculation, was considered.

The term, *virus*, is here understood in the broad sense of contagious poison. Bassereau, in 1852, by the "confrontation" of patients, established two diseases in the complex affection, syphilis—one local, the other constitutional. He was followed by a school of dualists who claimed for both affections, a specific virus of its own, incapable of generation *de novo*. But the experiments of Henry Lee, Boeck, and others, showed that the secretions of syphilitic lesions could be auto-inoculated with the effect of producing chancroids. The assumption by the dualists of a "mixed chancre," containing two kinds of specific virus, proved insufficient. Henceforth, the existence of a specific virus belonging to the chancroid must be abandoned. The same experiments were also supposed to prove the transformation of the syphilitic into the chancroidal poison, which conclusion was too hasty. Together with the secretions of syphilis, the products of simple inflammation had been inoculated; if these alone would produce the same result, then they were the guilty factor. That such is the case, is proved by the experiments of Dr. E. Wigglesworth, Jr., of Boston, in 1867–68, not hitherto published, and more recently by Kaposi and others, whereby it is shown that the inoculation of simple pus will produce pustules and ulcers, re-inoculable in generations, and bearing every characteristic of the chancroid.

While adhering, therefore, to the doctrine that the poisons of syphilis and the chancre are distinct, the Reporter denies that chancre has a specific virus of its own, and believes it to originate in inoculation of the products of simple inflammation.

The Section, with slight modifications, adopted the Reporter's views as follows:

1. The virus of venereal sores is dual.
2. Venereal sores may be due to the inoculation of the syphilitic virus, and also to the inoculation of products of simple inflammation.
3. These two poisons may be inoculated simultaneously.
4. (Additional). The present state of science has demonstrated that suppurating inflammatory lesions resembling chancres, may be produced on various portions of the body by inoculation with simple pus from various lesions.

Treatment of Syphilis with Special Reference to the Constitutional Remedies Appropriate to its Various Stages.—Dr. E. L. Keyes, Adjunct Professor of Surgery and Professor of Dermatology in Bellevue Hospital Med. College, N. Y., Reporter. The following propositions, slightly modified from those originally presented by the Reporter, were adopted by the Section: *Negative Conclusions, Views for which there would seem to be no Foundation in fact:*

1. Syphilis commencing mildly needs but little treatment, and does not require mercury.
2. Mercury given internally is necessarily debilitating.
3. Mercury is only useful in secondary syphilis.
4. Iodide of potassium is of considerable value in secondary syphilis.
5. Iodide of potassium is of no value unless preceded by the use of mercury.
6. Iodide of potassium acts by liberating mercury which has been lying latent.

Positive conclusions, which, in the present state of our knowledge, may be affirmed:

1. Mercury is an antidote to the syphilitic poison, and of service in controlling all its symptoms in all, even the latest stages of the disease; its power over gummata being least, and not to be relied upon.
2. Mercury in minute doses is a tonic.
3. Iodine cures certain symptoms of syphilis, but does not prevent relapses.
4. Mercury, long continued uninterruptedly, so far as practicable in small doses from the time of earliest eruption, constitutes the best treatment of syphilis.

SECTION ON OBSTETRICS.—The Causes and the Treatment of Non-Puerperal Hæmorrhages of the Womb.—Reporter, Dr. William H. Byford, Professor of Obstetrics and Diseases of Women and Children in the Chicago Medical College, began by saying that non-puerperal hæmorrhage was generally regarded as a

symptom, and that pathological causes do not often act singly. The uterus is naturally a hæmorrhagic organ. Attention was called to the researches of Engelman and Willams, if one would understand thoroughly the pathological conditions to which the uterus is subject.

The causes of non-puerperal hæmorrhage he divided into centric, and excentric or reflex. Under centric causes may be included all those which affect the uterus directly, *e. g.*, tumors of various kinds leading to a hyperæmic condition of uterus, subinvolution, carcinoma, chronic and acute endometritis, as well as those alterations in the shape and position of the organ which induce a venous, or a venous and arterial hyperæmia. Tumors pressing on the vena cava ascendens may likewise lead to engorgement of the uterus; also cardiac difficulties, though such are not apt to be serious. Certain constitutional vices—scurvy, leucocythæmia, chlorosis, plethora, etc.—may induce uterine hyperæmia of the uterus. A hæmorrhagic diathesis exists in some cases.

Treatment may be divided into prophylactic, curative, and palliative. Under prophylactic treatment may be included abstinence from all mental excitement and from certain drinks and food. When hæmorrhage begins, quiet in bed, and rest in the recumbent posture with the hips elevated or in the genu-pectoral position should be insisted on. Cold applications may be used, and cold and acid drinks taken. Little dependence is to be placed on astringents. For pain in the pelvis, opium or lobelia may be directed, or gelsemium sempervirens when there is much vascular or nervous excitement. In cases of local and arterial hyperæmia these will often answer, but may fail in venous engorgement.

More dangerous cases of hæmorrhage must be met by more potent measures, which may be divided into mechanical and chemical. Sims' plan of introducing cotton saturated with a solution of the liq. fer. subsulph. and water, one part in two, was highly recommended. One application is often sufficient. The cotton should be introduced into the cavity of the uterus, and the cervical canal dilated if necessary for that purpose with carbolized sponge-tents, which should never be allowed to remain longer than twenty-four hours (as a rule half that period) without changing. Should this plan fail, resort to the vaginal tampon, patient being first placed in Sims' position and all clots carefully removed. An ordinary surgeon's roller may substitute cotton or linen if they are not at hand.

Internally he has found hydrarg. bichlorid. with tinct. cinch. comp. of much value. Belladonna is well given in the form of

suppositories. If there be a condition of chronic congestion of the uterus and no tenderness, ergot may be used, but care should be taken that a sensitive condition of the organ is not induced. He has not found iodine in such cases of much value.

Where a condition of venous congestion exists, produced by displacement, the first factor in the treatment should be the replacement of the womb and its retention by proper pessaries. In cases of constitutional vice, the general health must be restored.

In the discussion which followed, Dr. Goodell spoke of the inertness of astringents used by the mouth. When used in conjunction with opium, he thinks the benefit only derived from that latter drug. Gallic acid is an exception if prescribed in doses of 20 to 30 grains, repeated every two or three hours until a half-ounce is given. He has seen some cases in which ergot seemed to be followed by increased hæmorrhage. Occasionally he is utterly unable to discover the cause of the hæmorrhage, and then he treats empirically. He applies chemically pure nitric acid to the cavity of the womb with good effect. He thought that the administration of hydrarg. bichlorid. acted as an alterative, and increased the number of red blood-corpuscles.

Prof. Simpson, of Edinburgh, called attention to the value of oxide of zinc given in one or two-grain doses *ter die*, but preferred gallic acid. He had no faith in the value of the tampon *per se*, and thought the perchloride of iron superior to nitric acid as an application. He advised the use of the curette in some cases, after the practice of Sir J. Y. Simpson and Recamier.

Drs. Bordon, Dean, and Sherman, spoke highly of the value of quinia in cases of non-puerperal hæmorrhage occurring in malarious districts, and thought it should never be omitted.

Dr Parvin, of Indiana, believed the most persistent cases depended on local causes. He thought that hot water applied over the spine in rubber bags was very efficient, and he also laid much stress on the use of quinia. He uses Churchhill's tincture of iodine freely.

Dr Barnes, of London, thought the use of quinia in malarious regions might be very necessary. He always uses it in cases of hæmorrhage from subinvolution, and does not think local treatment alone always sufficient. Lately, he has used the witch hazel very much, when the cause of hæmorrhage could not be ascertained. He condemned the use of the curette, and had seen two patients die from its use. The growth of small malignant excrescences was more rapid after using it.

The Mechanism of Natural and of Artificial Labor in Narrow Pelves.—Reporter, Dr. William Goodell, A. M., Clinical Professor

of Diseases of Women and Children, University of Pennsylvania, divided deformed pelves into three classes: 1. Flat pelves. 2. Generally narrow pelves. 3. Generally narrowed and flat pelves.

The mechanism of head-last labors was first considered, the various causes of difficulty, the means at our disposal for overcoming these difficulties; and the opinions of many different authors were cited, among whom were Martin Spiegelberg and Schroeder. He thinks version is not frequently enough resorted to, especially in France, where version is almost entirely neglected.

Dr. Fordyce Barker said that obstetrics is becoming more rapidly than any other branch of medicine an exact science. He did not think the vectis, which Dr. Goodell alluded to favorably, had received the attention of obstetricians which it invited.

Dr. Byford had not given much attention to the consideration of the vectis in his writings, as he had never looked upon it with much favor, but he was beginning to regard it as of much importance.

Dr. Lusk did not think that the forceps applied at the superior strait necessarily produced flexion, as stated in the paper read; nor did he entertain as much fear from the use of the forceps in deformed pelves as one might entertain from its teachings.

Dr. Barnes was very partial to version in such cases, though he had formerly advocated the use of the forceps. He thought the vectis of service only in cases of minor contractions. He laid special stress on the necessity of propulsion externally, or a *vis a tergo*, the force being applied by means of an assistant's hands.

Dr. T. K. Holmes, of Chatham, Ontario, read a paper on the **Management of Convulsions in Children Depending upon a High Temperature of the Body.** Attention was called to the importance of the subject on account of the great mortality from convulsions among children. Heat, he thought, acted as a direct excitant of the heart's action, while at the same time its action is correspondingly weakened. He laid down the principle that whatever reduces the temperature lessens the number and severity of the convulsions.

The treatment he considered under internal remedies and external applications. He deprecated most internal remedies, because, while allaying temperature, they tended to depress the patient. Quinia was the only exception. No danger whatever was to be apprehended from the use of external remedies, and it was on them that he mainly relied. Cold water he considered the most efficient agent at our disposal, applied in the form of a bath when the temperature was 100° Fahr. Tepid water should

be first used, and its temperature gradually reduced by the addition of colder water or ice until it sinks as low as 60° Fahr. Clinical histories of several cases of convulsions attending a high temperature were read, and the beneficial effects of the cold water bath stated.

Dr. Miner, of Buffalo, N. Y., read a paper on the **Enucleation of Ovarian Tumors**.—He first proposed the operation seven years ago, when, having occasion to remove a very large tumor, it was with wonderful facility disengaged from its capsule without the use of instruments. He claimed for the method that it was available in many cases; that no hæmorrhage resulted from the use of instruments; and that in case hæmorrhage should occur from the detachment of smaller vessels, it could be readily checked by torsion. He further claimed the advantage of having to deal with no subsequent purulent collection in the cavity of the abdomen, resulting so frequently in septicæmia; and that in cases where extensive adhesions had formed, the method was of special value, as the only means often at our disposal of finishing the operation already begun when such lesions had not been previously diagnosed.

Dr. Barnes said he was the first to introduce the plan into England. He thought it a good one, but it could not substitute entirely other methods of dealing with the pedicle. He did not entertain so much fear as the author in leaving silk and silver sutures in the peritoneal cavity, having frequently seen them left there without any bad result. He had also seen the perchloride of iron used to sponge bleeding points left after the breaking up of strong adhesions, and without the serious sequelæ which some writers attribute to its passage through the Fallopian tubes after intra-uterine injections.

Dr. White also believed other methods of dealing with the pedicle very necessary; that the cautery, the ligature, and clamp, all deserved attention, and must be used according to the indications afforded by individual cases.

Dr. Peaslee does not believe enucleation feasible in many cases, owing to the thinness and friability of the cyst-wall, which in many cases will break down before the adhesions can be broken up. Hæmorrhage also will frequently occur, as the vessels uniting the cyst and its coverings are not always merely capillaries, as Dr. Miner intimated. He thought that when the adhesions to the peritoneum were very tenacious, the cyst-wall being strong, the method was of great value and very applicable.

Dr. Kimball had never tried enucleation but once, but believed he might have saved some patients had he resorted to the method sooner. He spoke of the high success attending the use of the cautery in the hands of Dr. Keith, of Edinburgh.

Dr. Parvin spoke of the great value of water as hot as it could be borne by the hand, applied for the purpose of checking capillary hæmorrhage following the breaking up of adhesions.

The Treatment of Fibroid Tumors of the Uterus.—Reporter, Dr. Washington L. Atlee, of Philadelphia.—This consisted in medical and surgical treatment. The principal drugs for which any curative or palliative means were urged were iron, iodine, ergot, and muriate of ammonia. He had used ergot since 1845, and believed it beneficial, first, by its direct action in producing contraction of the muscular tissue; and secondly, by reducing the capillary circulation of the tumor. He had, however, never seen a tumor *entirely* disappear under its influence. Spontaneous cures may result either from the occurrence of fatty degeneration or senile atrophy.

He divided fibroid tumors into two great class: Those accompanied by hæmorrhage, and those unaccompanied by hæmorrhage.

Fibroid tumors occurring under class 1, he divided into—(a) Those found in cervical canal; (b) Those entirely in uterine cavity; (c) Interstitial submucous fibroids; (d) Interstitial fibroids proper; and (e) recurrent fibroids.

The treatment of those occurring under *a* varied according to their size. In many cases they may be twisted off from the pedicle; in others, the pedicle may be divided by the knife; and still others may be more successfully managed by the *écraseur*. He long since abandoned the ligature in these cases, and much prefers immediate ablation. The treatment of those under *b* vary according to the size and location of the tumor. The cervix should be dilated by tents or by rubber bags, or, in obstinate cases and where the operation must be quickly executed, incisions may be made in the cervix. Ergot may then be administered, and, the patient being anæsthetized, the forceps applied, and the tumor, previously separated by means of the bistoury, if necessary, extracted. If adhesions have been formed, they must likewise be separated by the bistoury. Interstitial submucous fibroids (*c*) may be in many cases first attacked to better advantage by means of ergot than the hazardous use of the knife. In this way they may be gradually forced from their position into the cavity of the uterus, and thus reduced to the variety *b*. More decided measures, however, are necessary where great hæmorrhage exists. In such cases, having opened the cervix as already stated, introduce a probe-pointed bistoury, the blade lying flat upon the index-finger until a point above the tumor is reached. Then, turning the edge of the knife towards the tumor, cut deeply into its substance. By this means severe hæmorrhage

may sometimes be checked when all other means have failed. Ergot should be administered; also antiseptic remedies by the mouth, lungs, and vagina. Sulphurous acid gas is unsurpassed as an antiseptic, and may be easily manufactured for inhalation by placing sulphur on a hot fire-shovel, carried through the chamber of the patient. It is readily tolerated by patients, even in very weak states of the stomach. In interstitial fibroids proper (*d*), Dr. Atlee was of the opinion that ergot was best used when periods of intermission from its use were allowed. He spoke very highly of the use of sorbefacients, especially muriate of ammonia, which he had been using for many years with the happiest effects. These tumors increase in size as the period of menstruation approach, and lessen when that period has passed. They often attain a great size, determining a large supply of blood to the uterus, and are thus the cause of great hæmorrhage.

Those fibroids occurring under Class II., not giving rise to hæmorrhage, were classified as interstitial subperitoneal fibroids; sessile subperitoneal fibroids; pedunculated fibroids; and interstitial cervical fibroids. Myomatous degeneration of the uterus was mentioned, and extirpation of the uterus by abdominal section recommended in severe cases.

Fibro-cystic tumors, called sometimes soft tumors, he thought might be benefitted by galvanism. Ergot has no value in the reduction of these, but he administers grs. x ammonia mur., *ter die*, and applies it also externally for its sorbefacient influence. In some cases he has seen their entire disappearance under the mode of treatment.

Dr. Dunlap believed a large number of tumors should never be interfered with, as after attaining a certain size they will disappear and give no further trouble. He preferred the knife to the *écraseur*, and thought ergot of value in submucous fibroids. He described a new method of dealing with the pedicle in cases of abdominal section for the removal of the uterus, consisting in the partial shelling off of the covering of the tumor, followed by amputation low down so as to leave a cup-shaped depression, and then withdraw the stump through the cervix, leaving no cut surface within the peritoneal cavity.

Dr. Kimball fully concurred with Dr. Dunlap in non-interference with tumors in many cases, because of their tendency to disappear spontaneously. He mentioned a case in which he removed the uterus on account of a sessile subperitoneal fibroid, applying a silk ligature to the pedicle, which he brought out through the cervix and which remained fixed a year afterwards, only disappearing a year (internally, the patient said) after eighteen months. Instead of the ligature, he now uses the *écraseur*,

searing the pedicle also, and fastening the écraseur externally by adhesive strips. He had frequently used muriate of ammonia, as recommended by Dr. Atlee, but with no success.

Dr. Peaslee said that wherever uterine fibroids are situated, he would never interfere unless they gave trouble. He thought ammon. mur. of much value, and that ergot was of value only when the tumor was surrounded by muscular tissue, when the contraction of the muscle would cut off the nutrition of the tumor. He alluded to the fact that women very rarely die from hæmorrhage in these cases, and if at all it was from septicæmia. In ordinary cases of hæmorrhage, he gave ergot in combination with tinct. fer. chlor.; and in severe cases threatening immediate danger, he introduced a tent into the cervix, followed by a vaginal tampon. He made allusion to the great necessity for disinfectant washes three times daily. In cases of great hæmorrhage threatening life, he would not hesitate to extirpate the uterus.

Dr. Barnes lost three cases last year from septicæmia in which submucous tumors had been incised, and felt very loathe to undertake the procedure again unless the entire tumor could be removed. When the tumor is large, he advocated gastrotomy.

The Reporter, Dr. Lusk, of New York City, read a paper on **The Nature, Causes, and Prevention of Puerperal Fever**.—The paper entered into the examination of the views of various authors upon the points presented, giving also a great many statistics. He mentioned the difficulty of giving a clear definition of the term puerperal fever, and said that he included under it all febrile conditions affecting the lying-in of women. The chief causes in its production, he said, were to be found in the atmosphere, and inoculation. Other causes giving rise to it were inflammation resulting from some traumatic lesion; imprudence of patients or nurses; moral causes; old peritoneal adhesions; and susceptibility of individuals.

Dr. Goodell spoke of the unreliability of statistics concerning puerperal fever in Philadelphia. He at one time knew of fourteen deaths which occurred in two weeks from puerperal fever, while the report of the Board of Health included for the same time only twelve deaths *in the entire city* from that disease. He thought patients should be isolated as much as possible as a preventive measure. Nurses should wear such material for clothing as can be readily washed, in order not to carry about infectious matters. Syringes should be allowed patients only in exceptional cases; and to facilitate the discharge of the lochia, patients should be encouraged to sit erect frequently. Floors should be washed with water impregnated with carbolic acid or some other disinfectant, which will prevent the growth of germs—always more

rapid in damp situations. In his experience, and in that of Dr. Addinell Hewson, Surgeon to the Pennsylvania Hospital, the temperature of patients was always much higher on the day following the cleansing of wards by means of plain water. If pain set in indicating a puerperal process, he at once gave morphia with quinia and alcohol. In 1021 lying-in patients whom he had cared for at the Preston Retreat, there had been but three cases of puerperal fever, all fatal. He did not agree with Prof. Barker, of New York, in giving *veratrum viride*.

Dr. Gordon, of Ohio, believed that the timely administration of quinia with ergot and alcohol would act as a certain preventive of puerperal fever.

Dr. Byford, of Chicago, believed with Dr. Lusk that puerperal fever was produced in many different forms. It appeared in some cases to be autogenetic, and in others had a zymotic origin. He related an epidemic of "black tongue," which had occurred under his observation many years ago, when during the height of the epidemic every lying-in patient in that locality died of puerperal fever. As the epidemic subsided, the virulence of the fever grew less; and when it had disappeared, no more puerperal fever was to be found.

Drs. John Atlee, Osgood, and White, reported cases occurring in their practice, conclusively proving that erysipelas was productive of puerperal fever.

Dr. White had great confidence in treating the disease with opium, and mentioned the extreme degree of tolerance for that drug in cases of the disease. He had given one grain of morphia every hour for forty-eight hours in one case, and in another had given forty-seven grains in forty-eight hours, both patients recovering.

Dr. Simpson, of Edinburgh, did not think we had to do with an entity in puerperal fever, but was of the opinion that it was often only a typhoid fever occurring in a puerperal patient. In our present knowledge of the subject it matters little, so far as treatment is concerned, whether the poison be chemical or animal. He recommended vinegar as an excellent disinfectant for washing the hands.

Dr. Semeleder, of New York, read a paper on **Electrolysis, with Special Remarks on the Treatment of Ovarian Cysts.**—We cannot imagine an electric current passing through the living body and not causing chemical effects, which is perhaps the only way in which electricity acts on the living tissues. The coagulation of albumen through which a galvanic current is led is analogous to what takes place in the living being. The chemical effects of the faradaic current are insignificant. He has cured

six cases of ovarian dropsy of various sizes and kinds in periods of time varying from one to five months. He calls the method *new* because, though in 1859 a German physician already published some cases, the method was not then noticed by the profession. He uses a mild current, and the sittings are short. No pain nor risk are involved; the patients are not etherized nor confined to bed. The fluid contents of cysts are absorbed, leaving but a small hard tumor. Conscience demands a trial of electrolysis before resorting to ovariectomy.

Dr. Simon Fitch, of New York, read a paper on **Paracentesis, Aspiration, and Transfusion**.—He spoke of paracentesis as once performed with the blunt, awkward instruments of the last generation; of paracentesis as performed by modern instruments; and contrasted these methods with paracentesis as it should be performed with the “dome-shaped trocar.” A trocar should be easy of insertion, harmless after introduction, capable of being used as a probe, adaptable to an aspirator, should give free exit to all fluids, and leave in the skin or tissue wherever introduced a clean incised wound. In all the trocars heretofore used, the canula was made to enclose the stylet. It is difficult to introduce the canula in some cases, owing to the resistance of surrounding tissue, *e. g.*, in the scrotum and the bladder. An injecting material, when thus used, frequently finds access to the cellular tissue, often giving rise to very troublesome inflammation. The “dome-trocar” consists in a canula enclosed in a tube, pointed at the extremity, the slope having an angle of 45° with the surface of the canula. The proximal extremity was curved, and so made that a rubber tube could be readily attached. When the stylet is introduced the canula is thrust forward, but its end is closed, “dome-shaped,” and at one side is a large curved fenestra. The rounded extremity of the canula permits it to be used as a probe while inserted in a tumor, with no possible danger of wounding the tissues. This trocar could be made of all sizes, and was applicable in a great variety of cases. The author claimed it to be of special value in transfusion, one trocar being applied to each end of a rubber tube having a bulb in the middle, in which case immediate transfusion could be practised.

Dr. Atlee, of Philadelphia, said he had used the instrument presented by Dr. Fitch, for more than a year and a half, and in upwards of forty cases of ovariectomy. He looked upon it as a perfectly safe instrument, and considered it very valuable in multilocular cysts in passing from cyst to cyst. No fluid escaped about the insertion of the canula, soiling the clothing of the patient and interfering with the neatness and cleanliness of the operation.

Dr. Trenholme, of Montreal, presented a paper on **Uterine Hæmorrhage**.—He confined himself to a form of hæmorrhage he had met with in pregnancy, which had never yet received attention from obstetricians. He had been called to see a woman several months pregnant, who had suffered from hæmorrhage for more than three months. An examination of the uterine cavity showed that the amniotic membranes had formed no attachment to the uterus, except on the right, extending upward from a point near the cervix, to a position above the entrance of the right Fallopian tube. The mucous membrane of the entire left half of the uterus, including the left Fallopian tube, was free from any attachment, and proved to be the source of hæmorrhage. The foetus was dead and removed. He thought such cases might assist us in solving the problem of super-foetation.

Dr. White, of Buffalo, read a paper on **Chronic Inversion of the Uterus**.—He has met with twelve cases since 1858, when he first successfully operated for the reduction of a case of twelve years' standing, and he had succeeded in reducing every case he has met with. From his experience, he believes that every case, of whatever standing, may be reduced. Failure to reduce heretofore has consisted in a lack of keeping up pressure upon the inverted organ for a sufficient length of time. The average duration of the operation in his hands has been over an hour, and the cases operated upon have been of all degrees of standing, from six months to twenty-two years. The patient should be placed on her back, with the thighs flexed, and feet and knees supported by assistants. The rectum and bladder should be emptied beforehand, and the patient anæsthetized. He uses a repositor, one end of which consists of a cup-shaped piece of India-rubber placed upon a hard rubber stem, about eight inches long, and curved to meet the requirements of the pelvis, while attached to the proximal extremity is a steel spring, conical in shape, the base of which is intended to be placed against the breast. By this means the hand is relieved, which, during the operation, should encircle the inverted uterus resting in the cup-shaped extremity, and thus direct the power applied. The gradual pressure will stretch the vagina, whose upper extremity will retract, the cervix thus permitting the passage of the fundus. When that has once passed to the level of the os, a large rectal bougie may be substituted, and the pressure continued until the organ is entirely replaced. Except in recent cases, Dr. White does not believe that pressure applied to the fundus will produce "dimpling" of it, and he considers the reduction of the organ, *as a whole*, necessary.

SECTION ON OPHTHALMOLOGY.—The Comparative Value of

Caustics and Astringents in the Treatment of Diseases of the Conjunctiva, and the Best Mode of Applying Them.—Dr. Henry W. Williams, Professor of Ophthalmology in Harvard University, the Reporter, considered (1) Affections of the conjunctiva in which neither caustics nor astringents are indicated. (2) The various forms of conjunctivitis, and the extent to which caustics or astringents may be usefully applied. (3) The modes of applying these remedies to best advantage; and (4) Complications, in which the conjunctivitis is the result of other morbid processes, or in which the existing morbid conditions are the consequence of previous conjunctivitis, with the treatment of such complications.

The conclusions offered by the Reporter were, after slight amendment, adopted by the Section, as follows:

1. In a considerable number of essentially transient affections of the conjunctiva and in pterygium or other growths, no active treatment by caustics or astringents is required.

2. When disease affects only a limited portion of the conjunctiva, as in phlyctenular inflammation, the mildest stimulating or astringent remedies are usually sufficient.

3. In the acute and chronic forms of general conjunctivitis, astringents are, as a rule, safer, as well as more efficacious than caustics, and therefore better adapted to the requirements of the general practitioner.

Are Progressive Myopia and Posterior Staphyloma due to Hereditary Predisposition, or can they be Induced by Defects of Refraction, Acting Through the Influence of the Ciliary Muscle? The Reporter, Dr. E. G. Loring, of New York, considered the hereditary predisposition of myopia. He discussed the questions (a) How far the law of direct transmission is influenced by the secondary law of heredity, which expresses itself in the tendency to revert to the normal standard; and (b) How far this tendency is influenced by intermarriage of different races, change of occupation, food, and manner of living.

These topics were illustrated by a brief comparison of the statistics of foreign countries with those taken in America. He next considered the development of the normal eye, and its relation to the conus and posterior staphyloma.

The following were the conclusions:

1. From the fact that so large a percentage of children are myopic, whose parents are near-sighted, while the myopia increases directly with the amount of increased tension of the eyes, and from the fact that an interchange of refraction may occur, whereby an eye which is not congenitally myopic may become so in spite of hereditary tendency against it, it would

seem to follow that hereditary predisposition, though undoubtedly a potent cause, is not only not the sole cause, but it is not even the predominating cause. 2. The action of the ciliary muscle, taken by itself, exerts but little influence on the production of myopia, and still less on the formation of the conc.

Of these conclusions, the first was adopted by the Section unanimously, and the second by a majority of 15 to 7.

SECTION ON OTOLGY.—Importance of Treatment of Aural Diseases in their Early Stages, especially when arising from the Exanthemata.—Dr. Albert H. Buck, of New York, the Reporter, based his remarks exclusively on affections of the middle ear associated with the formation of pus. He said that chronic purulent inflammation of the middle ear is a common affection. The serious nature of this form of disease oftentimes impairs the hearing very markedly, and occasionally terminates in death. The anatomical relations of the middle ear afford an explanation of the serious results that may follow an acute inflammation of these parts. He remarked upon the impotent nature of the means commonly employed for the relief of such an inflammation. But he spoke especially of the great value of paracentesis of the membrana tympani as a preventive of chronic purulent inflammation of the middle ear, and all its serious consequences. He urged the general practitioner to acquaint himself with the use of the speculum and mirror, as means of ascertaining accurately the condition of the ear.

The Section adopted the following conclusions on the subject:

1. Chronic otorrhœa is at the present time a very common disease, due in most cases to the want of proper treatment during the acute stage of the affection.

2. It is by no means a harmless affection.

3. It may be fairly classed as a preventable disease—at least among those who possess a healthy constitution.

4. Paracentesis of the membrana tympani, if resorted to during the first few days of the acute attack, and if not carried out too timidly, *i. e.*, if a free incision be made and not a mere prick, is almost a sure preventive of the subsequent chronic disease.

5. The profession at large, and especially the medical schools, should give the subject more earnest thought than they have in the past.

What is the Best Means of Testing the Hearing?—The Reporter, Dr. Charles H. Burnett, A. M., Aural Surgeon to the Presbyterian Hospital in Philadelphia, considered the character of the three principal tests (the watch, the tuning-fork, and speech) in use among aurists; the manner in which these tests are heard by the normal ear, and wherein the diseased ear fails

to hear them. In using the watch as a test, it is important to bear in mind the intensity as well as the position of its note in the musical scale. Its limited applicability; the stop-watch is most useful; conclusions respecting the watch as a test for hearing. The *tuning-fork* note is heard by the normal ear better through the air than through the bones of the head. When conveyed to the ear through the air, the tones of the tuning-fork are tests of the capability of the sound-conducting, as well as for the sound-perceiving apparatus. The notes of the tuning-fork may be conveyed through the bones of the head—*bone conduction*. Phenomena consequent upon placing a vibrating tuning-fork on the parietal protuberances of one having normal hearing—Blake's Koenig's Rods. Aerial and bone conduction of the vibrations of a tuning-fork in diseases of the ear. The tuning-fork used is chiefly in the latter way.

Speech has a greater range in comparison to either of the other tests mentioned which makes us prefer it to the watch and tuning-fork. The vowels are the most powerful and musical of all its notes. The consonants are also admitted to the rank of periodic, and hence musical sounds.

Deficiencies and discrepancies in the hearing power of the diseased ear were then mentioned. In some cases the power to hear certain sounds in the musical scale drops out, while the power to hear others remain comparatively good. Disease can be diagnosed by the manner in which an ear hears certain tests. Most probably the voice will give most aid in such a search.

Manner of Testing.—(a) The importance of isolation of the better ear, during the test, in one-sided deafness, was remarked upon. In any case, it is important to know how much is heard through the air, and how much is conveyed through the bones of the head. Want of precision in this has led to great errors in diagnosis and prognosis, in cases in which the nerve is good, but in which the sound-conducting apparatus, chiefly the middle ear, has been greatly diseased. (b) An arbitrary sound unit may be established for any form of test. An apparatus might be made to give out a set of notes of fixed value. Conclusions favorable to the human voice as a test were drawn from preceding remarks.

In What Percentage of Cases do Artificial Drum-Membranes Prove of Practical Advantage?—Reporter, Dr. H. N. Spencer, of St. Louis. The Section adopted the following conclusions, after the paper was read:

1. Of the various forms of artificial drum-membrane in use, the cotton pellet is preferable for its greater simplicity and its easier introduction, for the greater uniformity of its effect and the comparative safety in its employment.

2. It has an advantage over all other forms of artificial drum-membrane in that, additional to the functional gain which may be derived, there may be added its value as a means of treating the tympanum; and this therapeutical use of the artificial membrane has a great future in otology.

3. The continued use of the artificial drum-membrane as a means of improving the hearing is indicated in rare conditions which can only be determined by the aural surgeon.

What is the Best Mode of Determining the Hearing of School Children, and how should Partially Deaf Children be Instructed—in Mixed Classes with those who Hear Well, or in Separate Classes, where Allowance will be Made for their Defective Hearing? Reporter, Dr. Clarence J. Blake, Instructor in Otology in Harvard University. The following conclusions were endorsed by the Section:

1. The frequency of partial deafness in children during the period of school life renders it advisable to make some definite provision in public school-systems for compensatory instruction. 2. Since partial deafness is a comparative term, some provisions should be made for a proper determination of the degree of disability. 3. This is the best accomplished either by establishing a series of speech tests to be used by the teachers, or by instituting competent medical examination at the hands of a medical supervisor of schools. 4. Partially deaf children, when hearing is not so defective as to require special instruction in articulation and lip reading, are better taught in mixed classes than those who hear well. 5. Partially deaf children whose hearing is so defective as to interfere with the natural acquirement of articulation and to render the ear of little or no value as a medium for instruction, should be accorded the advantages of special instruction, of which instruction in articulation and lip reading should form a part.

SECTION ON SANITARY SCIENCE.—Dr. Henry Hartshorne read a paper on **The Disposal and Utilization of Sewage**, which paper recommended that every plan for laying out, or for extension of a city or town should have, as an indispensable part of it, a corresponding or co-extensive plan for the continuance of, or substitute for, the natural drainage of the locality, and for the proper construction of a system of sewers. The question in regard to the removal of waste and impurities from towns is not as to the maintenance of sewers, but as to whether they should be depended upon alone, or should be supplemented, more or less largely, by other measures of conservancy. Every sewer not supplied with a sufficient flow of water to secure the transportation of its contents, is a nuisance—intensifying the

evils it ought to remove. Ventilation of sewers will mitigate, but not entirely correct, such evils.

The General Subject of Quarantine, with Particular Reference to Cholera and Yellow Fever.—The Reporter, Dr. John M. Woodworth, Supervising Surgeon-General Marine Hospital Service, after reviewing briefly the practice of quarantine in the past, and as at present administered, discussed the mode of propagation of cholera and yellow fever, with the view of arriving, as near as possible, at what precautions are necessary and what restrictions superfluous in the administration of quarantine, which led to the principal question—the practice and methods which should be pursued to secure the greatest protection to the public health against cholera and yellow fever with the least restriction upon commerce. He said that quarantine should embrace general sanitation applied to the endemic homes of infectious diseases, to ships, and to the exposed places. It is impracticable to apply a uniform system of quarantine to all places without reference to differences of geographical condition and climate, the commercial relations of the countries concerned, and the specific character of the disease to be combated. Hence, the measures enforced should be modified to meet the requirements of each case, taking into account the liability to infection of the port threatened, the period of incubation of the disease, the length of time consumed in the passage of the vessel, and the sanitary measures enforced on board during the voyage. If these latter are recognized by the health authorities as they should be, this would furnish a strong incentive to proper ship sanitation—a most important aid in the exclusion of cholera and yellow fever. The consular officers of the Government should assist by giving timely warning of the outbreak of the disease, and of the sailing of suspected vessels. The thorough disinfection of infected articles should be insured, although disinfectants are not so much needed as cleanliness, and their value depends in a great measure upon the manner of their application. Dr. W. maintains that by applying to the sanitary supervision of ocean trade and traffic such practical measures as are indicated by experience, the hindrances to commerce will be lessened and greater security against the introduction of cholera and yellow fever afforded.

The following conclusions of the Reporter were adopted by the Section:

1. The supervision of ocean travel ought to be directed to securing good sanitary condition of vessels at all times, out of, as well as in port.
2. A system of *port sanitation* should be adopted and admin-

istered for each country or place, separately, modified in particular cases by taking into account the liability of the port to infection, the period of incubation of the disease, the length of time consumed in the voyage, and the measures enforced by the vessel *en route*.

3. In some countries the detention of passengers and crews of ships hailing from infected ports is warranted, but for such time only as is necessary to complete the period of incubation of cholera or yellow fever, counting from the date of departure from an infected port or landing from an infected vessel; but in no instance should passengers or sailors be held for observation on board an infected vessel, and such vessel should not be detained beyond the period required for inspection and thorough disinfection and cleansing.

4. Recognizing the fact that the modifications of infectious diseases may sometimes elude the most vigilant sanitary supervision of shipping, the importance of wisely-directed internal sanitary measures can scarcely be overestimated.

5. So far as America is concerned, it is desirable that prompt and authoritative information should be had of the shipping of passengers or goods from cholera and yellow fever infected districts, thereby insuring the thorough disinfection of infected articles.

6. It is believed that the endemic forms of cholera and yellow fever are the fields which give the greatest promise of satisfactory results to well-directed and energetic sanitary measures, and to this end an international sentiment should be awakened, so strong as to compel the careless and offending people to employ rational means of prevention.

Present Condition of Evidence Concerning Disease-germs.—The conclusions of the Reporter, Dr. Thomas E. Satterthwaite, of New York, after slight modifications, were adopted by the Section:

1. That so far as inquiry has been made as to the results of the active principles in infective diseases, it is probable that in a certain number the matter is particulate or molecular in form, and in the instances named, in no sense a soluble substance.

2. That in regard to the causes of septicæmia, pyæmia, puerperal fever, erysipelas, and hospital gangrene, and in cholera, small-pox, the carbuncular diseases of men and animals, of typhoid and relapsing fevers, and diphtheria, there is not satisfactory proof that they are necessarily connected with minute vegetable organisms.

3. That the real nature of these causes is still uncertain.

Dr. E. R. Squibb, of Brooklyn, N. Y., submitted a paper on

Metrical System of Weights and Measures. The following conclusions were adopted :

1. That the metric system of metrology, though by no means faultless, is now, by its almost universal acceptance, practically inevitable ; and, therefore, that all means should be used whereby it may be gradually adopted, so as to avoid, as far as possible, the abrupt shock incident to its sudden and forcible introduction in the future. 2. That the medical and pharmaceutical professions be recommended to adopt the suggestion of giving the equivalent values of the old and new systems in their writings as an easy way of rendering them familiar in use. 3. That the medical profession be urged to use their influence in having the metric system introduced into the leading colleges and schools.

Dr. Ezra M. Hunt, of New Jersey, read a paper on *The Present Relations of Pharmacy to the Medical Profession*. The following conclusions were adopted :

1. The interests of society and of the medical profession render it desirable that the furnishing of medicine should be surrounded with greater safeguards. 2. There are reasons why pharmacy should be regarded as a specialty within the precincts of the medical profession.

SECTION ON MENTAL DISEASES.—The Microscopical Study of the Brain.—The Reporter, Dr. Walter H. Kempster, Physician and Superintendent of Northern Hospital for Insane, Oshkosh, Wis., briefly outlined the progress made by recent investigators in studying the pathological histology of the brain in insanity. He then introduced the following subjects : 1. The importance of microscopic observations of the several cerebral membranes, to determine their pathological condition, and the relations that the various pathological states hold to the forms of mental aberration. 2. The abnormalities in arterioles and capillaries, including the various deposits on the walls of the vessels ; engorgement and its consequences ; the several changes observed in the coats of the vessels ; occlusion from minute thrombi, and embolism ; alterations in the course of the vessels, and the effect these conditions have upon the surrounding brain tissue. 3. Miliary aneurisms and miliary hæmorrhages ; the effect they have in the production of brain disease. 4. The peri-vascular sheath, and peri-vascular canal, as they are found in cases of insanity, were considered in their relations to adjacent brain tissue. 5. The various alterations in structure and form noted in nerve cells and nerve fibres, in the several forms of insanity. 6. The abnormalities in the neuroglia, and the conditions called “miliary sclerosis,” and “colloid degenerations,” were described, and the influence each

condition has in impairing normal cerebral action was discussed. 7. The various pathological conditions found in the microscopic examination of the brain in a number of cases of insanity, were illustrated by means of photo-micrographs, made from fresh and prepared specimens. The pathological states observed were considered with reference to the mental symptoms noticed during the course of the various forms of insanity.

Responsibility of the Insane for Criminal Acts.—The Reporter, Dr. Isaac Ray, of Philadelphia, remarked that there are still great differences of opinion among physicians, lawyers, and men of the world on the question, how far insanity shall be admitted as an excuse for crime. Lord Hale's doctrine that partial insanity—that in which the patient is reasonable and correct on many subjects—does not necessarily exempt one from the penal consequences of crime, still shapes the decision of English and American courts. Tests for determining what kind of partial insanity does, and what does not excuse for crime are diverse, unsatisfactory, and none supported by correct scientific knowledge of insanity. Delusion has been decided to be a sufficient excuse only when the criminal act committed under its influence would have been legally justified had the delusion been true. Notwithstanding many of the insane think and act correctly to some extent, yet it is impossible to say with any near approach to certainty in any given case where sanity ends and insanity begins.

Two mistakes are made by lawyers in estimating the responsibility of the insane, viz: they define the scope of the influence of the mental disorder in an arbitrary manner, unsupported by the facts of psychological science, and they regard the affective faculties as without any part in the play of disease. The latter mistake pervades the theories of the law and the judgments of those who pretend to no law. The moral, like the intellectual faculties, are dependent for their exercise on the brain—the larger part of the brain, probably, being devoted to this purpose. Consequently, disease of the brain must necessarily affect the manifestations of these faculties. Whether the one or the other class, or both, is affected will depend on the part of the brain diseased. Sanity supposes the integrity of all the faculties, moral as well as intellectual. If this integrity is destroyed, insanity is the result, wherever the lesion may be. Whatever faculties may be affected or not affected, apparently, responsibility is presumably impaired. It is for the party alleging the contrary to prove it. Punishment of persons admitted to be insane, for criminal acts, has been advocated for the sake of the example. No good effect can be shown by a single case in point. Patients in our hospi-

tals are never punished; they may be deprived of a favor or privilege which they have shown themselves incapable of using properly.

Wrong as our present mode of procedure is, no change for the better seems very practicable, unless it may be that which takes the question of insanity entirely from the court, and gives it to the jury as one exclusively of fact.

After the discussion, the following was adopted by the Section:

Whereas, There is at present manifested a tendency to hold the insane responsible for the commission of acts ;

Resolved, That this tendency is unjust, unphilosophical, and contrary to the teaching of pathology, which clearly points out that insanity is the expression of disease.

Simulation of Insanity by the Insane.—Reporter, Dr. C. H. Hughes, St. Louis, Mo.—Feigning of insanity by the sane has been long recognized as a fact. The possibility of similar efforts on the part of men really insane has been ignored or forgotten. The fact that the proof of simulation possesses no real practical value, in the case of a person already adjudged to be insane, is, probably, one cause of the rareness of recorded cases.

Advanced general dementia is incompatible with simulation. Acute and general mania are also incapable of co-existence with feigning. In recovery from the latter condition, circumstances might easily give rise to simulation of a state recently passed through. Experience and observation might certainly help to an excellent imitation of a state so lately endured.

Simulation requires and implies some degree of rationality, and usually some motive. This is by no means incompatible with insanity. In the remissions of periodic mania, in certain cases of chronic general mania, and certain forms of hysterical mania, and especially in affective or moral insanity without distinct intellectual impairment, simulation is perfectly possible and practicable. The existence of susceptibility to ordinary motives is recognized in the management of every insane asylum.

Striking instances of success in the simulated abandonment of delusions, so common in alienistic literature, suggest an equal facility at invention or pretence.

The criminal classes of our great cities are born and trained to deception. Simulation might very naturally be added to constitutional infirmity. Such cases probably occur oftener than is supposed. Many famous and historic cases might be most correctly characterized as compounds of simulation with actual disease.

Rarely does insanity affect all the faculties alike. Among the rational acts done by the insane man, simulation may happen to

occur. Especially probable is it that a man recovering from mania might imitate the crazy acts recently prompted by disease, if adequate motive existed.

Simulation is peculiarly practicable in those forms of insanity which involve the affective faculties, leaving the intellect comparatively untouched.

The question of responsibility in cases where simulation is mingled with actual disease is a very difficult one. The ancient legal test, "knowledge of right and wrong," is here wholly inadequate.

The motive for simulation in the insane of hysterical tendencies is often the craving for sympathy and attention. Occasionally, however, it seems to be wholly motiveless—a mere freak of disease. We should beware of inferring, because of detected simulation, the non-existence of disease.

The following conclusion of the Reporter was adopted by the Section: It is not only not impossible for the insane to simulate insanity for a purpose in any but its gravest forms of profound general mental involvement; but they actually do simulate acts and forms of insanity for which there exists no pathological warrant that we can discover in the real disease affecting them.

The Best Provision for the Chronic Insane, was the subject of a report by Dr. C. H. Nichols, Physician and Superintendent of the Government Hospital for the Insane, Washington, D. C. His conclusions, which were adopted by the Section, were (1) That provision for the chronic insane should be made by constructing buildings in connection with the several hospitals for the insane. And (2) that it is not desirable to construct institutions solely for the care of the chronic insane.

Report of Clinic on Coxalgia by Dr. Sayre, at the International Medical Congress.

Mr. Editor,—The Surgical Section met this afternoon at 2 o'clock, when the great American surgeon, Lewis A. Sayre, M. D., Professor of Orthopædic Surgery in Bellevue Hospital Medical College, New York, as Reporter, read his paper on "Treatment of Coxalgia." The author, after describing coxalgia, divided the disease into three different stages, giving the symptoms in each stage, so that they may be accurately diagnosed. He stated particularly that the disease is not necessarily of scrofulous origin, but almost always, if not always, of *traumatic* origin.

At the conclusion of his report, he exhibited a child (æt. 5 years) from New Orleans (that was carried to New York; but the mother, finding Dr. S. absent, followed him to Philadelphia). The child was in the first stage of hip-joint disease. The inter-

est in this case was on account of obscurity in diagnosis. As Dr. Sayre justly remarked, when the disease has progressed to marked deformity, having sinuses opening in different directions, any medical man can, at a glance, say it is hip-joint disease; and in such case the trouble may have gone so far as not to be arrested by operative interference. The great thing is proper diagnosis in the incipency, which can always be obtained if you follow out the rules and plans laid down by the Reporter, viz.: Strip the patient perfectly naked; then observe if there is loss to any extent of the gluteo-femoral crease on the affected side, with dropping or flattening of the nates of the affected side. You will also observe, after letting the child stand for a few moments, that he favors that side by making a solid column of the well leg, thereby taking all weight off the affected joint.

The Doctor now placed the child that was before the Section on a table. He preferred a hard surface upon which to lay the child, because the yielding surface of a bed or sofa would not allow the patient to assume a straight position; but the body would adapt itself to the yielding of the soft bed or sofa. After placing the child on its back upon the table, hold the lower extremities in such a position as to bring the spinal column straight and flat upon the table, so that a straight line drawn over the middle of the sternum, would pass over the umbilicus and the pubic symphysis. This line should be crossed at right angles by a line running from the crest of the ilium of one side to the corresponding point on the other side of the body. The well or unaffected leg can then be brought down so that its popliteal space will touch the table without disturbing the relations of the body on the table, or the lines already drawn. Now take the affected leg and try to place or bring the popliteal space on the table, and watch the result. The popliteal space can be brought almost or nearly to the position assumed by the well leg without disturbing the lines above referred to; but on attempting to bring the leg down flat on the table, mark the curve in the back or spine. The spine, which before was perfectly flat on the table, so that your hand could not pass under, now presents a curve under which the hand readily passes. This shows unmistakably that the child has hip-joint disease.

As another diagnostic point, the well leg can be flexed on the thorax, so that the knee is brought upon the chest without the disturbance of the lines; now we will try to do the same with the affected leg and watch the result. After flexing the leg to a certain extent, you have all the appearances of incomplete ankylosis, which prevents complete flexion. After a few moments of extension in the right direction, you will find that your appa-

rent ankylosis has disappeared, and that you have limited motion. This was most beautifully demonstrated in the case presented. The Doctor directed that extension and a loose splint be applied for the night.

The Surgical Section met at 11 A. M., to witness the application of the splints described in the papers of the preceding day. The first case that presented itself was that of a stout woman, who had the disease in the first stage. She had been under treatment for some time in the Hospital, and had been almost relieved or cured, but the splint was removed too soon, and the disease re-developed. The extension and splint were re-applied (for a detailed account of which method, see Prof. Sayre's work on *Orthopædic Surgery*).

The second case exhibited was one of the first stage, very far advanced. It presented the same characteristic symptoms as did the little child presented yesterday, but the symptoms were much more marked. Not having an instrument to fit the case, it was referred.

The third case presented was one of effusion of the second stage. The patient was wholly unable to stand or bear the slightest pressure. Night extension in the line of deformity was applied.

The fourth case (a boy æt. 4 years) presented, was one of the third stage, on which consultation was held with Mr. Adams, of London, Prof. Lister, of Edinburgh, Prof. Hueter, of Germany, Prof. Hjort, of Christiana, Norway, Prof. Hingston, President of Montreal Medical College, Prof. Post, of New York, and others; all agreed that exsection of the femur should be performed.

Chloroform was administered by Dr. S's able assistant, Dr. Chas. Sayre. Dr. Sayre here spoke at length on the use of chloroform and its administration. He said that twenty drops properly used was, as it proved in this case, all that was necessary to produce perfect anæsthesia, as in all others of the many cases where we saw it administered by his direction. Dr. Sayre operated on this patient in the manner described in his paper read before the Surgical Section, and also in his most able work on *Orthopædic Surgery*. You will find he lays great stress on the dressing, after-treatment and nursing.

Several of the gentlemen present, expressed great surprise at the immediate relief of the little sufferer that was—he showing much pleasure at being placed erect against the wall.

I cannot close this report without giving the expressions of some of the able medical gentlemen from abroad, as well as some of those of our own country, which should, and I know do gladden the heart of our great American surgeon and author, as well

as the proud hearts of so many of his countrymen, who were eye-witnesses to his elegance in the use of the knife and appliances. Mr. Joseph Lister said, "Gentlemen, I am very much astonished at what I have just seen, and I am more than repaid for my visit to this country, by being able to witness the operation just performed by Prof. Sayre. You saw the expression of the child when he was brought into the room; it was one of pain. See what a change has taken place; he seems perfectly happy now; before, he could not bear the least movement; now, you see he can be taken anywhere in the *ceurrass*. You all saw the mode of the operation, it is very simple in itself; but as Prof. Sayre says, it is the after-treatment that gives the good results, and I know of no better than the one pursued here. In regard to the other cases that we have seen, they have been very instructive; for they show that if we only take this disease in its earlier stages, we will in nearly all cases have good results. You saw the case of the woman, who had been suffering for two years; how soon she was relieved by proper treatment. Now that we have found the treatment, it is our business to employ it."

Mr. Wm. Adams, President of the Medical Society of London, also made some happy remarks complimentary to Prof. Sayre's operation. Others made similar expressions.

Before closing, let me say that Prof. Sayre was ably assisted by his son, Dr. C. H. Sayre, who promises to become one of New York's ablest surgeons. If the cases reported had been presented in Europe, the medical journals would have teemed with glowing reports. I therefore desire, through the *Virginia Medical Monthly*, to give "honor to whom honor is due."

Warrenton, Va., Sept 6, 1876. J. W. McILHANY, M. D.

Editorial.

The Proceedings of the International Medical Congress, which we have compiled with great labor, occupy so much of our space as to preclude the possibility of making any comments. Undoubtedly this was the most important of all medical assemblages that have ever been held on this continent. The hospitalities of Philadelphians made the sessions pleasant; and the benefits derived from the discussions by the ablest medical men of the world were great. An impression is left behind which will profitably influence medical opinion and practice here for a long series of years.

Because of the space we have occupied with this report, we shall have to lessen the size of two or three numbers of the *Monthly* before the expiration of Volume III. We are sure our subscribers will be willing to this arrangement, under the circumstances.

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Original Communications.

ART. I.—*The Border-land of Insanity—With Examples Selected from Among the Illustrious Insane.* (Being a Condensation of a Popular Lecture recently Delivered by Invitation at Different Places in North Carolina.) By EUGENE GRISSOM, M. D., Superintendent of the Insane Asylum of North Carolina, Raleigh.*

Between the kingdom of Genius and the habitation of Madness, there lies a strip of unknown breadth, which we may term the Border-land of Insanity. In this Border-land, have dwelt great numbers of the marked men of their race. The history of those of our fellows who have had glimpses into the greatest glories and the most frightful sorrows that may befall humanity, has for us a fascination beyond the wanderings of a Livingstone in equatorial wilds, or a Kane, amid the frozen secrets of the arctic North.

Philosophers have delighted in distinctions between what they call the faculties of the mind, for the want of a better term. Thus they name the power which receives and registers impressions from without, by means of the senses, *Perception*; the power which compares these and reasons upon them, *Intellect*; the power which is capable of response to outer influences and circumstances, *Emotion*; and the power which, in turn, sets in action the answer of the mind, the *Will*. But these are names, after all, and a mere approach in expression to such and such a

*It is rare to find a popular lecture suitable to the columns of a medical journal. The lecture we here present is unquestionably an exception to the rule. We know of no paper in which so many apt and instructive illustrations are introduced of the subject in hand.—ED.

capability of the mysterious being within us—the one and really indivisible essence which we call the immortal mind.

I must repeat some facts so well known as now to be simply truisms ; but these statements are indispensable in their relations to the conclusions, to which I invite attention.

The instrument with which the immortal part within us reaches the material world is the human brain. Thousands of facts tell us that from that centre, through the nerves of special sense, and also from the spinal cord, by numberless minute branches of nerves to the remotest parts of the body, go the telegraphic wires which bear the mandates of the mind.

There has arisen at this day a school of philosophers who aver that the mind is the mere secretion of the brain—a force and nothing more, expended in the act, created anew for each operation, and necessarily dying with the body that gives it existence, in the dreary death of annihilation. This specious philosophy, this glittering solution of the complicated phenomena of the mental world, making men the automata of physical force, when pressed to its logical end, knows no conscience, no right or wrong, no Divine law, and, indeed, no God in all the universe—only the likes and dislikes of atoms, and the blind whirlwinds of physical attraction. This dream—for it is only a dream—is spread over the length and breadth of the land, in our papers and magazines, in cotemporary addresses and poems, and is supposed to be entertained by many gentlemen of eminence in the medical world. It has perhaps become necessary for the protection of the young, to show that the faith of our fathers is impregnable, and founded on the rock of truth.

The mind that dwells within us is a spark of the Divine essence, destined to a life beyond the grave. Did I say that the nerves were the telegraphic wires of the system, and the brain the central battery ? True ; but the operator is the mind, separate and independent from the machinery at its command ; and the battery, while sending forth currents of influence to the farthest wires when the connection is unbroken, gives the jangle of unintelligent motion until the directing power of the operator impresses thought upon its quiverings, or direction upon its force, and registers his will in intelligible language. But if the wires are suddenly broken, or slowly rusted away ; or if, in the lapse

of time, the currents of the battery grow feebler, and die away finally for want of the feeding acids and metals, the play of whose mutual action is transmuted to electric force; or if the lightnings of Heaven seize and for a while range these wires with uncontrollable force—in any and all these cases the operator stands powerless to express his will. But he is nevertheless still existent, and if the damage be not irreparable, he is ready to resume control, so far as the delicate apparatus is readjusted and re-connected, and supplied again with the pure and efficient pabulum of its operations.

The proposition I assert is, that there is no such thing as a diseased mind, where the body is in perfect health, implying the brain natural in size, unaffected in its structure or functions by disease, and supplied with pure blood, unvaried by excess or diminution. The *mens sana* always resides in *corpore sano*.

Let any one of these conditions be destroyed by imperfect organization of the brain at birth, or by mechanical injury to its vessels, whether by violence or disease, or by poisoned blood circulating through its structure; and there comes a period when thick clouds envelop the spirit, and obscure mental appreciation, or even directly interrupt its every-day intercourse with men and things, and by degrees and insensible shades, the man drifts into the catalogue of the insane.

We cannot too distinctly realize that insanity is purely a physical disease, and as such calls for sympathy and care, and restoration, if possible. The time was when insanity was regarded as the possession of demons. As, in the dark ages, the hospitals were attached to the monastic establishments, it was not unnatural, in one point of view, that the discipline enforced among the monks for evil words and deeds, should be applied to the wretched patients committed to their hands. Hence, among the Franciscans, who enforced severe self-chastenings, each miserable lunatic received ten lashes per day to drive out the evil spirit. Stripes, chairs of restraint, tortures equal to the direst imaginations of the Inquisition, bleedings with the lancet, whirling chairs, whose gyrations reached a hundred revolutions a minute, iron cages suspended by chains over tanks of water so that the victims might be submerged to the neck—this frightful picture, which I will not further pursue, presents the system of

treatment for these unfortunates, lasting even to 1790, over a great part of the civilized world.

But, by the efforts of the wise and good, men have learned to know that this mysterious possession that for centuries blasted its victims, and set them apart from their fellows as the objects of wrath, or the playthings of devils and demons, was but a disease—one of the ills that flesh is heir to. Like other afflictions, sometimes insidious in approach, sometimes bursting on the sufferer with terrific suddenness, it is nevertheless, like them, a condition to be accounted for on a physical basis, preventable within certain bounds, and its cure, blessed be Providence, also possible, and even probable with favoring circumstances.

Can the mind suffer disease? Then it is pierced with mortal taint and will surely die, beyond hope of resurrection. Thousands of men come back to life and happiness, after even what some would call the death of mind. Why are they not new men, if the soul is a secretion of the brain? How is it possible that each man comes back to his own identity? Who has ever found himself or recognized another as a new being, gifted with a separate and independent mind after the passage through a season of lunacy, even of years? Voice, expression, language, views, tastes, education, whatever individualizes or differentiates one man from another, comes back to stamp him as such a creature of God, his Maker, and no other one.

What constitutes insanity and how the change occurs, I will not attempt to discuss. Hardly any two agree to-day upon precise distinctions in the former case, and the latter is yet an unrevealed book. But we do know its indications and accompaniments. Under ordinary circumstances, it is not the work of one generation. By this it is not meant that the parent must necessarily present the phenomena that we recognize in this disease, but he prepares the way for its development. And this he may do in a great many ways, but chiefly by abnormal and unnatural modes of life. He may gorge the brain with stimulating drinks for years; he may narcotize it with tobacco, or excite it by the fever of gambling at the card-table, or in the chances of speculative business; he may neglect the dictates of a reasonable hygiene, and give his life to mental exertion, keeping the brain filled with blood to its utmost endurance, in the intent study of

an idea, forgetful of the needs of physical exercise; he may abandon himself to sensual excess, or neglect the demands of sleep, or pursue the rewards of political ambition, or the vanities of social extravagance, until he has no life to transmit his offspring, except that which carries with it impaired force and defective structure.

It is a startling fact that this is the sin of the age—excess in one or many of these forms in this era of rushing social currents and conflicting destinies, and day by day retribution strikes her knell. One man is paralyzed; another is on the couch of a babe with profound nervous prostration; another is epileptic; another falls under the lightning stroke of apoplexy, like Dickens, or dies like Horace Greeley, the victim of insanity; while others again slowly drag out an intellectual night like that of the poet, Joseph Rodman Drake (author of the exquisite *Culprit Fay*, and for so many years past an inmate of an asylum), while others (in the words of a maniac himself) dwell in a land where

“There is a winter in my soul,
The winter of despair;
Oh, when shall spring its rage control?
When shall the snowdrop blossom there?
Cold gleams of comfort sometimes dart
A dawn of glory on my heart,
But quickly pass away.
Thus Northern lights the gloom adorn,
And give the promise of a morn
That never turns to day.”

Insanity appears to require both predisposing and exciting causes, where it is not the result of overwhelming violence to the brain. The great predisposing cause is left a heritage somewhere in the ancestry of the child. Thousands of years do not obliterate the Jewish nose; the Mongolian eye remains; the fair skin of the Northmen, transplanted eight centuries ago to secluded valleys in Italy, is yet preserved; nay, such a trifle as the Bourbon mouth is retained for centuries. Who does not see the stamp of parentage in expression, in the very shape of a nail, or tone of a voice? Who can doubt that there is at least a similar tendency to transmit the acquired conditions of the brain and nervous system; and the more so as this, of the whole frame, is the most impressible portion?

Just what changes in the structure of the brain invite the access of insanity, it may be impossible to tell. Sometimes there are enormous abscesses within its substance, or areas of hard-

ened or softened convolutions; again, it is studded with minute points of tuberculous or dead material; or there may be but the faintest blush of inflammation; not unoften the lesion defies the naked eye, and only after the brain has been artificially hardened, and a thin paper-like slice rendered transparent and colored with carmine, and exposed to long examination under the microscope, do the minute degeneration of its tissue, or the enlargement and false arrangement of its circulating vessels, betray themselves. Yet the difficulties here, as brave and industrious as pathologists are in the struggle to surmount the obstacles, are by no means greater than those which confront us on the threshold of inquiry in many diseases, and indeed in the final recesses of every physiological operation. What we call disease is, after all, but a collection of manifestations we term symptoms, hardly absolutely alike in any two cases.

If I must ask you to follow me through the devious ways of philosophers in explaining the road to the goal I would reach, it is that I am ignorant of other modes of approaching it.

We have spoken of faculties, for convenience sake entitled Perception, Intellect, Emotion and Will. Let us briefly trace the successive involvement of these, in the production of insanity.

Through *perception*, the mind takes knowledge of the objects around, and with the aid of memory, marshals them in their absence into a conception. Unreal perception is illusion—the first step away from just observation and conclusion. This is as common as the affairs of every day life. Any disordered sense may give rise to it. To a jaundiced tongue all things are bitter; in certain affections of the ear, bells are ever sounding, or waves roaring. We pass along a road at night, and are suddenly startled by a white milestone, which assumes the shape of the white-robed ghost of our childhood. Reason soon assures us that this is a momentary dazzle and disturbance of the sense of vision from its true work. But in some lives, illusions by thousands chequer and disturb the whole course of existence. Let us go patiently on to observe.

A *conception* of an absent object is the revived impression which has been preserved in whole or part by memory. So a hallucination is an illusion that reason does not dispel, but which

hangs about the mind seeking admittance into the domains of admitted truth. If we do not dismiss the momentary sight of the ghostly milestone as the glare of disturbed sense, but fly before it, and every moment turn to see it pursue, we are the victims of hallucination. That which more distinctly illustrates hallucination as disordered conception, is the striking fact that men whose eyes are out may have hallucinations of dread visions before them, and so of the other senses.

Perhaps the hair's breadth between the excitement of the sane mind and the beginning of the insane condition lies somewhere here; the one may still compare his hallucinations with past knowledge, and refuse to accept their dominion over him; the other may submit without question, and be lost. Yet, the question has been asked, can the mind be both sane and insane at once?—can these hallucinations ever be the legitimate children of a mind perfectly normal?

The next downward step is to absolute delusion. If pursued by the spectral hallucination which we have described, we some day in uncontrollable weariness and despair, turn and strike down the monster by our side, and so unwittingly destroy a wife or a child at our feet, fixed delusion has done its work, and henceforth we are numbered among the host of maniacs. Who shall say where the subtle line was crossed? Who shall say what under-current of life drifted us into that maelstrom?

The lamented Greisinger affirms ideas which, briefly stated, show that those whose fate it is to be stricken with a hereditary disposition to this disease, turn imperceptibly to crooked paths which lead only downwards; their cerebral actions are different from those of the majority of mankind. The impressions of the outer world impinge upon an abnormally excited centre; uncommon conditions arise, unnatural dispositions are excited; by and by active irritation sets in; a tendency to weariness follows; imaginations which are for the moment the passing whims of healthy brains are cherished and maintained; by and by the dark and bitter side of life is all they see. The brain disease becomes fixed, its results are reflected in diminished and perverted nerve power throughout the system, and so by impoverished blood, back again to the fountain head in circling rounds down to helpless dementia.

It is not the least extraordinary fact, in this curious subject, that what are called the primordial delusions of insanity are so well defined and constantly repeated. The famous man from whom I have quoted ascribes such recurring delusions, not to emotional foundations as their source of production, but rather attributes their direct origin to cerebral disturbances. He beautifully illustrates, by comparing this with the contrast of the walk of the man in health, and that of him whose nerve force in the spinal cord has been impaired by disease: "As the ganglion-cells of the spinal cords work together in the most exquisite manner, receiving exact sensitive impressions of the floor as touched by the foot in a regular motor manner, making complete harmony, so by such disease as shows anomalous action of the cells, there is produced, whatever may be the effort of the will, such a walk as exhibits the fatal mark of want of harmony." This occurs in some of the most intractable cases that affect the frame of man.

By complete analogy, the processes giving rise to imaginations, take place in the ganglion-cells of the outer surface of the brain; in the normal state, these actions, though numberless, work together in beautiful regularity; but by the anomalous action of the cells of the cortical substance of the brain, words and imaginations appear without a real existence.

We shall find that the great of this earth have often been the unhappy subjects of the most cruel hallucinations, and even the victims of confirmed delusions, ending not unoften in outbreaking mania or lingering melancholia. We shall find, to the confounding of those who would ignore the nobler part of man and reduce mind to the level of a material secretion, that sages, philosophers and poets have given their grandest productions to the world between the attacks of disease, and during the interval, as it were, when the veil was withdrawn and the bars broken down that resisted the control of the immortal part over the poor frail shell that subserves its uses in the fleeting present of this life.

I would not rashly say that all the great names to which I shall presently advert, must be placed upon the rolls of the undoubtedly insane; but I will aver that there is not one whose life does not show at some time the evidence of perverted or impaired cerebral force. And in proportion as we discover a tainted

parentage, a badly trained childhood, an intense mental strain, or extraordinary physical excess or disturbance, just so far may we trace their wanderings into the mysterious Border-land that I have described—the realm where Genius and Madness rule with divided sway. In the language of Erskine, “To constitute insanity, it is not necessary that Reason should be hunted from her seat; it is enough that Distraction sits down beside her, holds her trembling in her place, and frightens her from her propriety.” It is Lord Brougham who declares that “the inability to struggle against a delusion constitutes unsoundness of mind.” And in regard to partial insanity, he affirms that the disease is always present, and only not apparent by the accident that the proper chord is not struck at the time. It has often been proposed as a test, that it is indicative of the affection that there be a delusion, if but rarely manifested, and a state of mind incapable of mastering it.

Hallucinations take possession when the reason, having a cloud before it, cannot correct the misapprehension of the lower senses. “It is a state of ideal intellection,” says the celebrated Prof. Ordonaux, “in which the reason, after long struggling to maintain its ascendancy over the judgment, has finally yielded, but after yielding can still apprehend and compare correctly the relation of things. Thus even the insane rarely have hallucinations of more than two senses.”

It is a pregnant fact in this connection, that the original basis of hallucination is often prolonged reverie. Perhaps it is of little consequence whether the cerebral fullness that gives rise to disordered brain action be the result of congested brain without voluntary effort, or the sequel of long continued voluntary and strained attention, especially if the blood vessels by inheritance, have been weakened to the point of yielding. The melancholy result is the same. Long ago Aristotle said: *Nullum magnum ingenium sine mixtura dementiæ*; and this has been a prolific text. Some writer, indeed, has ventured the observation that “all who have been famous for their genius, whether in the study of philosophy, in affairs of State, in poetical composition, or in the exercise of the arts, have been inclined to insanity or epilepsy, or one or the other of these diseases has existed in the same family.”

I will ask you now to consider with me some of the innumerable men of power or of genius who have signally exhibited the fate of humanity when hallucination or delusion leads it away into the Border-land of Unreason.

Charles IX of France, the impotent boy whose name ruled France, under the sway of his mother, goes to the Castle of Blois to welcome the Protestant Chieftains after long and useless civil strifes. He agrees to the marriage between his sister, Marguerite, and Henry of Navarre, his cousin, and cries, "I give my sister in marriage, not only to the Prince of Navarre, but as it were, to the whole Protestant party."

The scheme effected, and the Protestants safely ensnared in the city of Paris, upon the occasion of the wedding solemnities, the wretched boy gives the signal to the alarm bell that tolls two o'clock on the morning of Sunday, 24th of August, 1572. Old men, terrified maidens, helpless infants, venerable matrons—all are stricken down in their blood. Trembling at the very sound of the deep echo to the alarm, he cries out to stop, but too late. Beacon fires have lit their baneful glares, and alarm bells are sending the signal to the remotest corners of France. Recovering from his terror, fury seizes him, his eyes glare with frenzy; he shouts to the assassins, and grasping a gun, he joins the work of death, shooting from the window of the palace, the wounded and the flying. Torches are held on high, that his own body-guard may slaughter in the very court yard of the palace, the fugitives who stream to the King for protection. "Let not one Protestant be spared to reproach me!" was his mad shout. What pen can ever picture the terrors of the massacre of St. Bartholomew, which spilled the blood of a hundred thousand Frenchmen! The world was struck with horror. Geneva, to this day, commemorates it with fasting and prayer. Elizabeth hung her court in mourning. The pulpits of Scotland rang with the tale. John Knox declared, "sentence has gone forth against that murderer, the King of France, and the vengeance of God will never be withdrawn from his house."

And the day of retribution did speedily come. The echo of the world's indignation was in the heart of Charles. He, who had, with sublime hypocrisy, told Admiral Coligny, when suffering from an assassin's wound: "Father, you received the wounds,

but I the sorrow;" and yet who had seen that venerable body dragged through the streets three nights after, and hacked to pieces in his very presence, was overcome now—not by the fear of man, but with a frightful, indescribable, nervous horror. Everywhere around him he saw the spectres of the gory slain, showing their gaping wounds and attended by threatening demons. He became morose, gloomy, and finally completely silent. He left all society, and month after month the scorpion fangs of remorse gnawed his heart. Finally, his very bed clothes were crimsoned with a sweat of mortal agony. His aspect of profound misery drove off all human companionship. He groaned and wept and forever cried, "Oh, what blood!" He is deserted by all but his nurse, and he calls out with despairing eyes, "What blood have I shed?" and dies—cut off at twenty-four. The very courtiers turn away from a corpse so accursed, and but three gentlemen in all France are found to accompany the body to its tomb in the vaults of St. Denis.

The history of royalty is full of proof that the brain whereon the crown rests is often no more fit for royal cares, than that which the plaited straw surrounds in yonder poor maniac's dream.

Thus read a page or two of the life of Frederick the Second of Prussia, the father of Frederick the Great. For a dozen years before his death, and after long and repeated seasons of the extremest debauch, the King's health gave way; what the world recognizes as hypochondria, set in; a state of profound despondency and bodily suffering. He became as austere in religious observance as before he had been wild in excess. All conversation in the royal family was forbidden, except upon religious topics; he compelled all its members daily to read sermons and sing hymns. He obliged the prince and his sister to eat most nauseous dishes—would even spit in their food—addressed them always in severe language, and struck at them with his crutch. His disease was plainly exhibited when he tried to strangle himself; but his life was saved by the Queen.

Having beaten Prince Frederick more than once to the point of exhaustion, he seized him finally by the hair and threw him to the ground (for his physical strength was great), beat him as long as it gave him satisfaction, when he dragged him to the

window in maniacal fury to throw him headlong, but was happily prevented by those who came to the rescue. Failing in the effort to secure a renunciation from the Prince of his right of succession, he allowed him to attempt to escape, in order that he might obtain sentence of death upon him, by a court martial; and that he tried to anticipate by an attempt to run him through with his own sword. Failing in the sentence of death, he condemns both the Prince and his sister, his child and tender daughter, to the cold cell of a prison, and begins a course to convert them to christianity.

Writing a letter to the prisoner's chaplain, he betrays the long cherished delusion that had mastered his brain. He knew, he said, that his son had a heart of iron, and was a puppet in the fangs of Satan. All this was to drive out the demon and convert his unhappy boy to a reasonable being. The Prince was confined in a miserable room, and on the very edge of starvation for a great length of time. The King never recovered his reason; yet such was the ignorance of that day and the sacredness of power, that he grasped the crown to the very last. It may even be doubted if the child of so much persecution, the great Frederick, did not himself exhibit the deep mark of his father's malady, in a thousand minute details which we will not stop to reckon here.

Indeed, so far from peace and health and strength as the heritage of the imperial purple, the dazzling seat of power has always held some uneasy, toppling wretch, whose sceptre was half unreal in his nerveless grasp. Philip of Macedon was once insane; King Saul is clearly pictured so; Mahomet was an epileptic, given to magnificent visions; Cæsar was another epileptic, and as Cassius says, like a sick girl when the fit was upon him. Napoleon believed in his star as ruling his destiny; he is reported also to have suffered from epilepsy, twin-sister of madness; he is known to have lost a great battle when in much bodily suffering and confusion of ideas from a fit of indigestion; he was not unoften surprised in profound solitude watching some airy figure of his brain, and holding his hand to the retreating shade.

On the other hand his antagonist, Castlereagh, the architect of the Union of Ireland with England in one legislative body, whom parliament thanked for his labors in the settlement of Eu-

rope, after the fall of Napoleon, became shattered in mind from the great labors of the session of 1822; and although known to be in a fit of insanity, his physicians allowed him to go to his seat in Kent, where he soon took his own life.

Peter the Great, whose exploits have been the wonder of our childhood, and whose powers of administration, and superb executive energy challenged the admiration of all men, paid alike the inevitable penalty of a vicious ancestry and a disordered life. He gave himself up to the control of evil passions, and the most debased sensual excesses. History abounds with the strange freaks that will occur to every reader. He sees his son, Alexis, condemned to death; at another period, he remains three days and nights fasting, upon the death of Peter, his favorite son, and his own life was despaired of. Again, for maladministration, he flogs with the *dubina* (his cane of Spanish reed) the person of the celebrated Menzikoff, prime minister of the realm. Finally, the paroxysms of an obscure disease, which physicians recognize as exceedingly painful, ushered in outbreaks of wild mania, and he came to the grave.

Victor Amadeus I, of Sardinia, was a victim of kleptomania. King as he was, he could not resist an overpowering inclination to commit the most petty thefts of valueless trifles.

Queen Francisca, of Portugal, is another monarch whose insanity was so complete as to remove her from the throne in the early part of the century.

But probably no page of royal calamity possesses the interest to the American people, which hangs about that which recounts the misfortunes of George III. This monarch, it has been said by a distinguished authority, was one who might least have been expected to fall into insanity, by hereditary predisposition, or bodily constitution. But will not a full examination of his history rather indicate the contrary opinion? The father of the Hanoverian line, Duke William, of Lunenburg, called William the Pious, was deprived by fate of sight and reason. "Sometimes, in his later days," says Thackeray, "the good Duke had glimpses of mental light, when he would bid his musicians play the psalm tunes which he loved. One thinks, says he, of a descendant of his, two hundred years afterward, blind, old, and lost of wits, singing Handel in Windsor Tower."

The fifteen children of William, the Pious, had but a small inheritance, and the sons drew lots to determine which should marry and continue the line of Guelphs. Upon the sixth brother, George, the fortunate lot fell. You are familiar with the fortunes of his descendants; how, after Queen Anne's death, the English throne went to the distant Elector of Hanover, who did not even know the English tongue. He seems, with his court, to have spent his days in plundering his subjects; quietly, his worthless and criminal wife, it is well known, was a State prisoner for thirty-two years. The son, George II, knew no law but his passions. It was he who challenged his brother, King of Prussia, with sword and pistol, to settle a great transaction; day and seconds were chosen,—only the fear of the ridicule of Europe stopped them. He lived among women unfit to touch the hem of the garments of the pure, the life of a Turk in his Seraglio, at sixty years of age. He tainted society by bad example, gross and low, from youth to hoary age.

The son whom he hated, and drove from his house, without his own children to accompany him, was Frederick, who died before reaching the throne, leaving a son, George III. George II was found dead, it was said, in an epileptic fit. The new King never mentioned his father Frederick. What could he have been, hated and forgotten by parent and child?

George III, was a dull boy, of little brain, brought up without much education, by a very domineering and narrow-minded woman. The child was kept in loneliness and gloom, deprived of pleasures, and filled with prejudices. The hard and cruel mother, once seeing the young Duke of Gloucester unhappy, sharply demanded why he was so silent. "I am thinking," said the poor boy. "Thinking, sir, of what?" "I am thinking if ever I have a son I will not make him so unhappy as you make me."

After his marriage with a plain but excellent German girl, the King lived a quiet country life; but the penalty of the transgression of former generations must be enforced. He was insane five times, first in 1765, when he was but twenty-seven. This followed immediately after a cure of a chronic eruption on his face. In 1778 his malady returned with fearful power. All the gestures and ravings of the maniac appeared, and the wild howlings of a beast. He attempted to throw himself from the

window, and for a time it was thought life would give way. The attack lasted about five months, when he resumed the reins of power. The fact is a touching one, that an early act upon recovery was to visit a poor house and examine the new rooms being prepared for the more comfortable accommodation of lunatics and express his gratification at the work of charity.

Perhaps a single anecdote may be admissible here concerning his treatment. Although he soon became calm, and never evinced any disposition to strike or injure any person or furniture, he was subjected to mechanical restraint to increase his self-control. No patient, not even the humblest wretch, would now be subjected to the ordeal which he underwent. A writer relates that while walking through the palace during his convalescence accompanied by an equerry, they observed a straight-jacket lying in a chair. The equerry, averting his look as if to conceal some embarrassment, the King said: "You need not be afraid to look at it. Perhaps it is the best friend that I ever had in my life." The famous Dr. Willis was his physician, and asserted that the attack came from "weighty business, severe exercise, too great abstemiousness and little rest."

George III was again seized in 1801; for a few months in 1804; and for the last time in 1810, as he remained in that condition until his death in 1820. Among his delusions was one that he could preserve an intercourse with the dead. Once in the council addressing himself to two friends, long in the grave, Sir Henry Hallford, the court physician, reminded him that they were dead. "True, was the reply, they died to you and to the world in general, but not to me. You, Sir Henry, are forgetting that I have the power of holding intercourse with those whom you call dead. Yes, Sir Henry Hallford, it is vain, so far as I am concerned, that you kill your patients." When he had been several years a patient in Windsor Tower, he was found by the Queen one day singing a hymn and playing on the harpsichord. When he had finished, he knelt, prayed for his family and the nation, and implored the restoration of his mental powers. Suddenly he burst into tears, and the veil between him and his kind had fallen again.

His entire reign was the era of the bitter strifes of Pitt, Fox,

Sheridan, Burke, and all the immortals of that age of British oratory. The poor dull King, with the common people at his back, arrayed himself against the patricians. He said he knew he wanted his people's prosperity; so whoever did not think with him, and stand ready to obey, must be a traitor. Hence his war upon the colonies. The Americans were petulant rebels who must be taught to fear God and honor the King, much as his stern mother had disciplined him, and he succeeded, and war was declared. The poor mad King, who bore a disease stricken frame for eighty years, cried at last for mourning to wear, when he heard a funeral knell, for, said he, "Poor George III! I know he is dead."

Turning from the royalty of place to that of human genius, and high fame, we are literally bewildered amid the throng of those upon whom brain disease laid its mark, whether lightly, as the touch of a child, or even like the fiery brand of the executioner.

Among the ancient worthies, great Socrates himself did not escape. Plato and Xenophon, both speak of the familiar *daimon*, which they averred, always accompanied him, and when it made its voice heard, always guided his plans. This has been supposed a hallucination of hearing. And what a man was the great philosopher, wearing the same garment an entire year, barefoot in winter and summer, often dancing wildly, carrying his head in a strange position, with no occupation but preaching in the markets and shops, and pouring his relentless irony upon friend and foe, perhaps to return upon the world what he bore from his own wife. He is said by Diogenes Laertius to have remained an entire day, in a trance, in one position, standing and hearkening to a celestial voice, at the Siege of Potidea. Yet this is the man, whose sublime doctrines, by ancient and modern alike, are confessed to be first in the heathen world.

I will not dwell upon the references in ancient lore to the madness of Hercules and Ajax, Ulysses and Lysander, Bellerophon and Plato himself. But, in more modern times, we find Tasso, the immortal author of *Jerusalem Delivered*, shut up for years, a victim of the wildest delusions. Benvenuto Cellini, the artist, sees a resplendent light hovering over his own shadow. Raffaelle himself declares that while painting the *Transfiguration*, that

magnificent creation of human genius, he might well have been considered an enthusiastic madman. He forgot himself absolutely, and the whole action passed before his eyes. Pascal, whenever in intense thought, beheld a fiery gulf open by his side. If his attendants placed a chair between him and the precipice, composure might return, as he beheld an obstacle between himself and danger,—so portentous is the power of diseased imagination! Descartes, whom I need not characterize as one of the greatest minds known to fame, was followed, as he supposed, by an invisible person, calling on him to search for truth. Metastasio, who described in his exquisite writings the sensations of incipient madness, drew it from his own unhappy experience. Cruden, the author of the famous Concordance to the Bible, wrote it while insane. He was three times within an asylum, once before he was twenty years of age. Joan of Arc, the maid of France, suffered from a physical disorder, which any physician recognizes now as the forerunner of insanity; and a thousand facts show that this maiden of poetry was a victim of a form of insanity, in which there is the full conviction of the possession of supernatural power. Kean, the actor, died from mental strain, in personating Othello. Rousseau was followed by a life-long delusion that he was persecuted by the entire world. Jerome Cardan, the greatest physician and natural philosopher of his time, was tormented with hallucinations, as was Paracelsus, also.

Pascal, to whom I have already referred, and whose mathematics were only second to Newton, after he had broken down his physical frame by fastings and vigils, and overworked his weary brain, actually wore an amulet against the demoniac visitations that destroyed his peace.

Indeed, "overwork of the brain," it has been justly said, "is unlike an excess of labor when demanded of other organs. They refuse to discharge their functions when overtaken, or gradually gaining rest, are at last enabled to accomplish the task. Overworking the stomach destroys the appetite, and the duty is no longer imposed. Overworking the muscular system does not break down that, but rather the nervous system with which it is so nearly connected. The overworked lungs throw part of their work on the liver, and the overworked liver on the kidneys. But the overworked brain finds no helpmate in the economy of the

organism." Lest one appear to judge rashly, let us look more closely to the record.

Torquato Tasso, whose *Jerusalem Delivered*, alone ranks with the *Paradise Lost*, the *Iliad*, and the *Divina Commedia*, the four great epics of mankind, was born in 1544, and was the son of the poet, Bernardo Tasso. To scan his life in few lines, his young brain was tutored with Greek and Latin at seven years. At seventeen he had written an epic. It was in 1565 that he met Lucretia and Leonora, sisters of the Duke of Ferrara, at the court. With them he lives in close friendship, and for them he entertains the loftiest admiration. While at the ducal court, he hears that his great poem has been published by stealth in an Italian city, without his authority or the corrections he designed. This unmans him; he imagines himself pursued by enemies, and even draws his sword upon the peaceful servant of the Duchess of Urbina. He is arrested, but his condition speaking for itself, is given to the care of a physician. Soon he grows worse—he leaves even his beloved manuscripts behind and flies. By and by he begs to be allowed to return; but the evil returns, and he once more roams away to Mantua, Padua, Venice—everywhere fleeing an imaginary pursuer. At last he ventures again to Ferrara, and no one noticing the poor wretch, he abuses the Duke in the presence of his court. For this he languishes long years in a prison cell at St. Anne's Hospital, while all through the Italian peninsula, six editions of his wonderful poem are enriching the publishers and delighting the people to such a pitch that, until this day, the very peasants know and repeat his musical stanzas. Seven years of dreary confinement ensued long after apparent restoration; but the malady recurs at Florence, and also at Rome. For just as he had reached the fruition of his hopes, and by a solemn act, the Pope had decreed his coronation with the poet's laurel on the 25th of April, 1595, that very day the exhausted frame succumbs, and the garlands of honor fall upon the brow of death.

In tracing the history of extraordinary men who have lived in extraordinary delusions, Emanuel Swendenborg must not be forgotten. This celebrated philosopher, a geologist and man of scientific learning, filled many offices of distinction in Sweden, from which he voluntarily retired when, as he says, he was in-

troduced to the spiritual world while in London in 1743. For about thirty years he spent his time alternately in Sweden and England holding converse, as he believed, with heavenly spirits and receiving their revelations. He imagined that he maintained long conversations with the most eminent of the dead of antiquity. He described with minute detail the form and fashion of the abodes of blessed saints in Heaven, and his works fill many volumes. In private life he was honest, learned, virtuous and a profound thinker. These revelations were received while he was in long bodily trances. He died suddenly of apoplexy, in 1772. You say perhaps, that he only differed from other lunatics, by a purer life and more intense mentality, and has long been forgotten. No, indeed; his church is to day one of the recognized religious denominations of this country, and there are edifices for Swedenborgian service, in many of the largest and most intelligent cities of the United States. Some of his prophecies have been regarded as wonderfully correct, such as predicting a great fire at Stockholm at the very hour of its occurrence. But to one who would inquire farther, it is only necessary to say, that angel and saint and demon, all talk in his books, as ordinary men of the eighteenth century did, and all the minute explanations of natural phenomena, alas, are based only upon the rude conceptions of a century ago, and none of his revelations anticipated the truth even as it is known to-day. Yet, to this day a million or two of people are enthralled by the fascination of a maniac's dream!

I approach the name of the Colossus of English literature with profound reverence. Never was the truth more deeply illustrated that the mind's great powers lie behind, and beyond and immeasurably above the miserable accidents of bodily organization; and yet never was the dividing wall that in the play of fitful disease cuts off the communion of the nobler part, with fallen man, more sadly, but vividly displayed, than in Samuel Johnson. This great essayist, the formative artist of late English, the author of the exquisite *Rasselas*, the compiler of the first great Dictionary of our tongue, which has been a mine of wealth for all its successors,—Johnson, the good and great, who bore the ills of fate with such fortitude, maintained his integrity in the sorest temptation, and became the very arbiter of the tongue he

spake, by universal consent, *him* we have known; but how is our sympathy increased when we know his inner life. It is full of lessons to illustrate what I would say.

His father was beyond fifty and his mother over forty when they were married. The father was afflicted with melancholy, and only saved from absolute insanity by constant horseback exercise. With a sedentary life, he at once relapsed. Samuel was himself scrofulous, and was even taken to London, prayed over, and touched by Queen Anne, but unfortunately it was of no avail. He was blind in one eye, the result of his disease, and subject from his earliest years, to moods of the deepest gloom. We are told by his biographer, in significant language, that "his malady broke out before he left the University, in a cruel form." In his twentieth year, it came upon him in a dreadful manner. It happened at Litchfield in the college vacation of 1729, and he was never perfectly restored. He declared long after that all his labors and enjoyments were "mere interruptions of its baleful influence." Sometimes he was unable to tell the hour by the clock. He walked to Birmingham and back again, frequently, in hope to drive away the malady by forcible exertions. He placed his medical supervision in the hands of his god-father, Dr. Swinfen, and was mortally offended when the Doctor revealed the truth to his own daughter. Again and again, he touchingly laments his constant hovering upon insanity. In writing of the unfortunate poet, Collins, who was in confinement, he says "Poor Collins! I have often been near his state, and have it therefore in great commiseration."

He would place his hand on all the posts set by the sidewalk in the streets, and if by chance he missed one, he was unhappy until his steps were retraced. He would shut himself up for days, to walk from room to room sighing and groaning; to go out of doors, he must take a certain number of steps, and with a certain accustomed foot, in a definite place. His grimaces, gestures, and mutterings terrified strangers. At a dinner table, he would stoop down, and twitch off a lady's shoe. He would conceive an aversion to a particular street, and could not be induced to walk there. The poet, Christopher Smart, it is well known, who was afterwards committed to an asylum, exhibited his mental disturbance, by falling on his knees to say his prayers in the

street. Like him, Johnson would suddenly call out sentences of the Lord's Prayer while in a crowded drawing-room, and in the gayest company. With senses morbidly asleep, and imagination morbidly active, his life was one long torture. Many a man, so wretched, would have shot or hanged himself. He had the appetite of a beast of prey; were the meat spoiled or the butter rancid, so much the better; he would devour until the veins of his forehead swelled to repletion. Hallucinations of hearing pursued him; miles away, again and again, he thought he could hear his mother call him by name.

Yet he struggles manfully; he feels that he is lost, unless by stern self-control, he may stay the on-rushing tide. He drinks less wine, and never at night any more; he struggles to moderate his appetite; seeks exercise, and keeps his mind busily employed. He marries a widow as old as his own mother, short, fat, coarse in manners and in features, painted, deeply dressed in gaudy colors, and void of grace. But, with his one eye, and that short sighted, he pronounces her lovely, is a true and loving and noble husband, and long after he buries her in her sixty-fourth year, speaks of her to his friends, as "Pretty creature!"

He writes *Rasselas* for a hundred pounds to defray the expenses of his mother's funeral. As the years go by, oblivion creeps over, and he is wrapped in complete idleness and despondency. When in Kent, September 18th, 1768, he writes: "I have now begun the sixtieth year of my life. How the last year has been passed, I am unwilling to terrify myself with thinking. I was disturbed at church this day in an uncommon degree, and my distress has had little intermission. This day it came into my mind to write the history of my melancholy. I know not whether it may not too much disturb me." Eight years after, he writes: "When I survey my past life, I discern nothing but a barren waste of time, with some disorders of body, and disturbances of mind very near to madness, which I hope He that made me will suffer to extenuate my many faults."

He had the gait of one in fetters; his habits were uncouth, voice loud and imperious, temper violent, with a great readiness to take offence. He advises Boswell against melancholy in these words, good for all times, "If you are idle, be not solitary; if you are solitary, be not idle."

He loved poor Savage, another wretched poet and unhappy man of genius. The wildest romance would barely equal this man's real fate. As a famous writer says: "An Earl's son, and a shoemaker's apprentice, he feasted among blue ribbons in St. James' Square, and lay with fifty pounds weight of iron on his legs in the condemned ward of Newgate. He dined on venison and champagne when he might borrow a guinea; to-morrow he appeased the rage of hunger with scraps of broken meats, and lay under the piazza of Covent Garden, or as near as he could get in the ashes of a glass house." When these sons of misfortune parted, it was in tears—Johnson to his long internal strife, Savage to die heartbroken, in the west of England, in Bristol jail.

In 1784, Dr. Johnson left his friends at Litchfield one morning, and set off at an early hour, returning at night weary and drenched with rain. There was a silence—no one ventured to ask the reason. After a solemn pause, he said that fifty years before, during an illness of his father, he had refused that father's request to ride to Uttoxeter market and take his accustomed place at the stall where he sold books—all out of boyish pride. To do away with this sin, he said, that day he had gone, and, indeed, had stood in the market place bareheaded in the pelting rain for one hour, before his father's ancient stall, exposed to the jeers of the populace, performing solemn penance in the sight of heaven. Monumental marble now represents him in that act of filial devotion. The end was soon to come—rapidly recurring fits of anger and melancholy are succeeded by a stroke of paralysis; for awhile he cannot speak and cannot write. Dropsy, so common with the insane, closed the scene. The next year, December 13th, 1784, the fatal moment which had been an unutterable dread all his life, came to find him in serene frame, patient and gentle, his noble mind, his true self, ready for translation to a world of peace, with the dark clouds of a lifetime rolled away forever.

(TO BE CONTINUED).

ART. II.—*Gelseminum for Dilatation of Cervix Uteri.* By JAMES A. AGNEW, M. D., Burkeville, Va.

In conversation with a distinguished specialist, I learned that he had not seen an allusion in gynæcological literature to gelseminum* as an adjuvant to mechanical means for dilatation of the cervix uteri. I have tried the agent in three cases, and it has afforded decided, material assistance in each instance.

The first patient upon whom I tried gelseminum had retroflexion of the uterus. The cervix was small and conical; the os was at the apex of the cone, and was so nearly closed that I could not introduce the smallest laminaria tent. I had two conical bougies made by an ingenious blacksmith in our village—the little end of the smaller bougie being not larger than a knitting needle. Even this small instrument could not be introduced.

While sheathing a bistoury for the purpose of incising the lips of the external os uteri, the influence of gelseminum over sphincteric action occurred to me, and I determined at once to try it. I gave ten drops of the fluid extract of gelseminum every ten minutes until thirty drops had been taken. Immediately after the last dose, without the slightest difficulty, I passed successively the bougies and a No. 1 sponge tent up to the point of flexion. On the fourth day thereafter, I failed in every effort to introduce a No. 2 sponge tent until the fluid extract of gelseminum had been given as before. After this was given, the tent was readily passed up to the point of flexion; and, to my great satisfaction, after a little manipulation, it passed this point, and there was no further trouble in the operation of dilatation.

I have tried gelseminum in two other cases, with equal success. I will not hazard an opinion as to the *modus operandi*; but will leave that investigation to scientists who have more time for such work than country practitioners, who are on the road two-thirds of their time.

*Dr. Robert S. Payne, of Lynchburg, Va., contributed to the December No., 1874, of the *Monthly* (page 553), two cases, showing the value of *Gelseminum in Cases of Rigid Os Uteri and Sphincter Perinei*, which, so far as we know, were the first cases reported anywhere.

ART. III.—*What Opium Does Administered During Labor, and How it Does it—Clinically Illustrated.* By Z. COLLINS MCELROY, M. D., Physician to the Home of the Friendless; to the Muskingum County Infirmary; Fellow of the Zanesville Academy of Medicine, etc., Zanesville, Ohio.

May 22d, 1876. Mrs. P. P., aged 35, mother of 5 children, all living and in good health; lives in the country; has rarely had need for a physician except at her confinements. She has every necessary of life, and many of its luxuries. She expected her confinement in April, but had in some way lost her reckoning; had no labor pains till last night. I arrived at the residence about 9 o'clock this morning. Mrs. P. was sitting in an easy chair, having only two or three pains per hour. The distance from the city forbade my leaving her, though it was evident that she would not be delivered before evening, if then. No examination was made at the time of my arrival. An examination about noon revealed the unpleasant fact that, up to that time, labor had made no progress during the time I had been at the house. Her pains continued to recur in the afternoon about as they were during the forenoon. An examination about 9 P. M. disclosed that she had still made no progress evident to the touch. I could hardly insert the tip of my finger in the os uteri, which was drawn as tight as a drum-head over a large presenting vertex. The situation was becoming very irksome to me.

In critically examining the situation, the first question considered was, Is the lady in labor at all? The lapse of time beyond her expectations, the regular recurrence of pains without other obvious cause than labor, together with some other symptoms difficult to describe—information conveyed by the touch—all forced me to the conclusion that she was in labor. The next question was, Why this delay in the performance of a strictly natural function, to wit: natural birth at, or very nearly at, full term? My answer to this question will be seen as I proceed with the report.

The patient complained of much discomfort about her pelvis in the intervals between her throes. No actual pain, but a very disagreeable feeling of pressure or tension was present all the time, but more marked during her pains. The os was barely within reach of the forefinger; the vertex of the child's head

rested on the membranes, with no liquor amnii between them. Apparently, the greater the pressure on the vertex of the neck of the womb, the more obstinately the os refused to open and allow the child's head to escape.

The profession designates this condition *rigid os uteri*. And since every minute deviation from an ideal natural condition must have a name, this expresses but a single fact ascertained by the touch, and is, therefore, not felicitous in directing attention to all the facts concerned in bringing about this condition. Why is this woman's os uteri and cervix in this rigid state—constant tension? Is it a pathological condition to be changed by the lancet, hip baths, hot fomentations, vomiting, chloroform or ether by inhalation, opium, etc., into a physiological state? I did not thus regard it.

To my mind, there are two elements determining function, viz.: structure, that is, the membranes; and, second, motion—physical or chemical changes in the materials of structure. Changed function is an unerring index of changes either in the molecular arrangement of the materials of structure; or of changed motion in its materials—one or both, leading to corresponding changes of function. Undoubtedly, this woman's os and cervix—viewed as structure—had the physiological function of contraction to retain the contents of the womb—in all respects analogous to that of the sphincters of the bowel and bladder, whose physiological design is contraction. A rigid os uteri is, therefore, a natural process out of time, rather than a pathological state; it is a derangement of motion in materials of structure, and not of the molecular arrangement of structure, as an ordinary condition. The force opposed to the delivery of my patient, since my arrival in the forenoon, has evidently been about evenly balanced with that endeavoring to accomplish it. Both are necessary forces; and had they concurred to a common end, she would have been delivered long before I could have reached her in the morning.

That these opposing forces should concur to bring about delivery, there must be an interchange of apparent function between the body and cervix, so to speak. Thus, the cervix, which has been, since impregnation, in a state of tension, must dilate; while the body, which has been almost entirely passive—allow-

ing of growth and expansion to accommodate the steadily increasing volume of its contents during the period of gestation, without apparent resistance, including its own growth—must contract.

The facts of experience and observation teach that the sudden apparent interchange of function between the uterus and its neck and outlet, at full term of gestation, permitting an almost painless and rapid delivery, is exceptional in human child-birth. The rule is delay and more or less difficulty before the completion of labor. If a search for the means that bring about these ends extend no further than to the structures of the womb and its contents at full term, they would probably never be explained. But, a survey of the whole domain of organic life will reveal many analogous processes, calculated to throw light on the how and why of this apparent interchange of function. Thus: the appearance in the infant of temporary teeth at the time it should commence using them, to give place, in due time, to an increased number of permanent teeth, or the appearance of the necessary means for reproduction at a still later period, are examples in the human body of similar processes. Still more striking examples are found among inferior animals—as the “shedding” of hair by horses and cattle, their seasons of sexual heat, &c. In the vegetable world, the dispersion of the seeds of the flowering balsam, and of the seeds of the common nettle, are examples of the development of means to ends. The rigid os uteri during labor is, therefore, simply a misapplication of a natural and necessary force intended to accomplish an important end—delivery.

To restrain this misapplication of force, and obtain a co-operation of all available force for the completion of labor, the profession has had resort to the lancet, tartarized antimony, ipecac, belladonna ointment, chloroform or ether by inhalation, opium, hot fomentations, hip baths, mechanical force, incisions of the edges of the os, &c. And each of these measures, some of them very opposite in their *modus operandi*, singly or combined, have been more or less successful, as demonstrated by actual clinical experiences.

In the case which I report, regarding the pathology of the condition simply as a misapplication of a natural and necessary force, my way out of the difficulty was to restrain the total of

available force for labor. The therapeutic agent which will most certainly do this is opium. The patient is, therefore, to have at once forty drops of a solution (gr. j to 3j) of morphia sulphate. I told her lady friends to call me at 11 o'clock, if she did not get any sleep.

At 11 o'clock her husband told me his wife had not slept any, and was, if anything, in more pain than she had been before taking the medicine. I gave her forty drops more of the solution of morphia. At 2 A. M., I was called again. The os was dilated to about one half the extent necessary to allow of delivery. The labor went on steadily until a little after 3 A. M., when I slipped the edge of the os over the vertex, waited a few pains, when, finding there would be needless delay in terminating the labor, I applied forceps, and completed the delivery at 3½ A. M.

Occasions arise for us to correct defects, or errors of presentation, which we do mechanically, with assisted or unassisted hand, and position of patient. In the present case, it seems to me, I only corrected a misapplication of force by opium—that is, by chemical means. And that, to my mind, is a correct solution of the so-called “parturient effects of opium”—a very simple matter when understood, but an impenetrable mystery outside of the reality.

The mother and child both did well, though the so-called “soporific effects” of opium were present all the next day.

ART. IV.—(1) *Pleurisy with Effusion*—(2) *Hydro-Peritoneum*.

A Clinical Lecture delivered at Bellevue Hospital, New York.

By AUSTIN FLINT, M. D., Professor of Practical Medicine in Bellevue Hospital Medical College, etc. (Phonographically reported by a Special Reporter.)

Pleurisy with Effusion.—W., an Englishman, aged 22 years; occupation, shoemaker, was admitted September 26. He had not been addicted to the use of alcoholic drinks; had had chancre, and when a child had scarlet fever. With these exceptions, he had been a healthy man until September 23d, when he was seized with a lancinating pain under the left nipple; was unable to lie upon either side; and the pain prevented him from sleeping. When admitted, he was somewhat anæmic; bowels constipated; pulse, 120; respiration, 36; temperature in the axilla, 101°F.; and he had severe pain in the left side. A ca-

thartie was administered; and on the 27th, his pulse was 122; respiration, 35; and temperature, 100°F.

Comments.—Taking into consideration that we have a patient, age 26, who was seized with a pain in the left side that was accompanied with increased frequency of pulse and respiration, and a moderate increase in temperature, what are we to seek? Acute pleurisy is suggested, and pneumonia might present itself with these symptoms. There is no history of cough or expectoration; but pneumonia occurs occasionally, not very frequently, without either of these symptoms. We have these two inflammatory affections to look for. But may it not be a case of intercostal neuralgia? It is true, the temperature is increased, which fact might seem to exclude other than inflammatory diseases, but pleurodynia may give rise to some elevation of temperature. We have, then, to take into consideration, *first*, pleurisy; *second*, pneumonia; and *third*, pleurodynia.

With regard to the latter, when we find the temperature raised one or two degrees, unless it be transient, we are warranted in saying the patient has inflammation somewhere, or an essential fever of some kind. If there has been no increase of temperature, we are warranted, as a rule, in excluding both of the other conditions mentioned. The history of this case does not show that there was any elevation of temperature prior to the development of the difficulty in the chest; so we may reasonably exclude any essential fever. But it is fair to presume that, since the beginning of this attack, there has been continued elevation of temperature, for the thermometer has shown such to be the case since his admission, and that without any special change in the symptoms which were present. We may, therefore, with a certain degree of safety, exclude pleurodynia.

Physical examination, however, will clear up this point at once. The differential diagnosis in this case, we may safely say, lies between pneumonia and pleurisy. What do we find as we come to inspect the chest? In the first place, it is noticed that the apex of the heart is in its normal position. That would at once exclude the presence of any considerable amount of pleuritic effusion in the left pleural cavity, the side upon which the pain is situated. There are some diagnostic points with reference to the *seat* of the pain. The patient says that the pain is felt all

around his left side. That fact is in favor of pleurisy; for the pain of pneumonia, although often lancinating in character, particularly at the end of inspiration, is usually confined to a circumscribed space about the nipple, while the pain in pleurisy is more or less diffused over the entire side. Again, there is no difference in the appearance of the two sides, although in some cases the difference in appearance is marked; the respiratory movements are seen to go on in the case before us without perceptible change.

As pleurisy is the disease first suspected in this case, we may ask, What are the physical signs? what is the physical condition? There occurs, very shortly after the attack, an exudation of lymph upon the opposing surfaces of the pleura; very soon after this, as a rule, we have more or less of liquid effusion into the pleural cavity. It is possible that at the very commencement of the disease, the lymph upon the surfaces of the pleura, coming in contact, may give rise to a rubbing or friction sound, but it is not always present; and, moreover, when cases of pleurisy come under the observation of the physician, a certain amount of liquid effusion has taken place. Practically, therefore, we seek for evidence of fluid in the pleural cavity. The quantity of fluid may be small or great. In some cases, the chest rapidly and almost completely fills with serous fluid, but this is rare. It is not uncommon, however, in examining a chest to find one or the other pleural cavity half or two-thirds full. If, now, we find evidence of the presence of fluid, and, perhaps, a friction sound, we are able to exclude pneumonia—at least as the leading element in the case—and we are brought to a positive diagnosis.

Let us now study the signs somewhat in detail. In the first place, I will percuss the chest anteriorly as the patient is lying on his back. You hear an appreciable difference between the two sides. The resonance upon the left is somewhat greater than upon the right side; is higher in pitch, and is somewhat tympanitic in quality; in other words, the resonance is *vesiculotympanitic*. That is the rule over the lung above the level of the liquid. The same kind of resonance is also obtained in the second stage of pneumonia. When the lower lobe of a lung is solidified, the vesiculo-tympanitic resonance is obtained over the lower lobe; so, when the upper lobe is in a state of consolida-

tion, it is present over the lower lobe. Now, as percussion is extended downward over the left side of the chest, the resonance is found everywhere until the nipple is reached, when it becomes purely tympanitic. The tympanitic resonance, in this instance, is due to a gaseous distension of the stomach. At no point over the anterior surface of the chest do we get dullness or flatness while the patient is in the horizontal posture. Upon making the patient assume the upright position, there is, as you hear, resonance at the upper portion of the chest anteriorly; but as we approach the nipple, there is marked dullness upon percussion, which, as the patient lies down again, is changed to the purely tympanitic resonance; so that, we are taught nothing by this manœuvre with reference to the presence of fluid in the pleural cavity. Let us next interrogate the posterior part of the chest. There is resonance at the upper portion, but when a point a little below the angle of the scapula is reached, only the slightest resonance can be heard; it is almost complete flatness. Now, keeping the finger upon the line, we will have the patient turned over to the right, and, again, distinct resonance is obtained where almost perfect flatness was present before the patient's position was changed. We have now demonstrated that the flatness upon percussion posteriorly is produced by something in the pleural cavity sufficiently yielding to permit a change of level by changing the position of the patient, and that must be fluid. In this instance, the quantity of fluid is very small, and it is rapidly diminishing from day to day. The quantity is distinctly less to-day than it was yesterday.

With regard to the auscultatory signs below the level of the liquid, there is diminished or suppressed respiratory murmur. If the quantity of fluid be considerable, there will be suppression of the respiratory murmur; but if the quantity is small, it will be diminished in intensity, but it may be detected. It occasionally happens, when there is a considerable amount of liquid in the pleural cavity, that the vesicular murmur is transmitted from the opposite side, or from above, to beneath the level of the fluid. The vesicular murmur upon the healthy side is increased in intensity if the quantity of effusion is considerable. Again, with reference to the auscultatory sign related to the voice, if the quantity of liquid be considerable, the vocal resonance will be

suppressed; and if it is only slight, the voice sounds may be heard below the level of the fluid. So it is with vocal fremitus—the effect of liquid effusion is to diminish or suppress it. We also seek for another sign, which, as has already been stated, is not always present, but, fortunately, is present in this case. For, as the patient is asked to breathe with a little more force than ordinary, there can be heard distinctly, both with inspiration and expiration, a rubbing sound. It is a sound produced by the rubbing together of two roughened pleural surfaces, and is not heard when these pleural membranes are in a healthy condition. This friction murmur varies in intensity and character from a mere crackling to a rough, grating sound. In this case, it seems to be seated superficially. It is curious how distances within the chest from which sounds come can be appreciated, and in this way you may be able to distinguish between the superficial friction sound and the râles developed deeper in the chest.

The question may now be asked, Why is not this a case of pneumonia with pleurisy? It is not a case of pneumonia in which a certain amount of liquid effusion has taken place, because we fail to get any of the physical signs of pneumonia, although the evidences of pleurisy are obtained. What are the physical signs of pneumonia to be sought in this case? After this lapse of time, if pneumonia were present, we should have evidences of solidification of the lung. The physical signs of pneumonia when it has reached the second stage, or stage of consolidation, are usually well-marked; we have bronchial or broncho-vesicular respiration and bronchophony; vocal fremitus will be increased, instead of diminished or suppressed. Not having these signs in this case, where there are evidences of a certain amount of liquid effusion into the pleural cavity, we are warranted in reaching the conclusion that we have to deal with pleurisy, and pleurisy only.

Treatment.—When the quantity of effusion is small, other conditions being good, the pleurisy itself does not place the life of the patient in any great danger. The only immediate danger is from an unusually large and rapid accumulation of fluid in the pleural cavity; but such cases, fortunately, are not of frequent occurrence. In a case like this there is, therefore, no indication for the use of those measures sometimes resorted to to

promote absorption when the quantity is large, nor for aspiration. The only indication is to palliate the suffering of the patient by the moderate use of anodynes, render him comfortable, and improve the general condition by the use of tonic remedies and nutritious diet. The patient is anæmic; his lips are pallid; and although he was in good health at the time of the attack, his appearance indicates that his general system is somewhat run down, and therefore demands support. Give it such support, and the pleurisy will take care of itself. We shall find cases, however, in which the indications for treatment, as far as the pleurisy is concerned, are distinct and prominent.

Hydro-Peritoneum.—This case illustrates hydro-peritoneum, or ascites. The enlargement of the abdomen, as you see, is excessive, and it is uniform. A sense of fluctuation can be easily obtained. It would seem that diagnosis, as relating to the contents of the abdominal cavity when it contains fluid, does not involve much difficulty; but there is a liability to error here, as elsewhere. Ascites may be confounded with an enormously distended, or a sacculated bladder; with pregnancy; tympanites; ovarian cyst; chronic peritonitis. These are the more common conditions, perhaps, that are liable to be mistaken for ascites, but there are some other conditions which we will not now stop to consider. This form of dropsy, like all others, is but a symptom. It is convenient, however, to speak of these different forms as we would of different forms of disease, for the reason that we are not always able to trace them to the primary condition upon which they depend.

When it occurs, as seen in this case, it is, in a vast majority of instances, indicative of cirrhosis of the liver. The essential pathological lesion of cirrhosis of the liver is an increase of the areolar tissue in the interlobular spaces. The development of fibrous tissue in that situation is due, it is supposed, to a chronic inflammatory action, which is ordinarily brought about by the use of spirits, and usually taken upon an empty stomach. Taken in this way, the spirituous liquors pass into the system very rapidly, and there is produced, as a local effect, this chronic inflammatory condition. A few indulgences, occasional debauches, paroxysmal drinking, do not usually produce this condition; it is rather the continuous drinking that produces the development

of fibrous tissue in this situation, which gives rise to mechanical pressure sufficient to obstruct the current of blood; hence portal congestion is followed by dropsy. Sometimes, in consequence of such portal congestion, hæmorrhages occur, such as hæmatemesis, and hæmorrhage from the bowels.

With this exceedingly brief outline of the more probable cause of the dropsy in this case, and clearly indicated by the history, we will pass at once to the question of

Treatment.—The object to be accomplished is to get rid of the accumulation of fluid; for, enormous as you see it is, it interferes in a most decided manner with the circulation through all the digestive organs, and consequently is a prominent obstacle to maintaining a proper amount of nutrition. Diuretics may be administered, but my experience has been such as to warrant me, I think, in saying that the chances of success by the use of diuretics in these cases is almost *nil*. Hydragogue cathartics would be better; but the effect of these would be to produce more or less exhaustion, and it will be necessary to repeat them over and over again, and probably in the end success will not be obtained. Does it not look like plain common sense to introduce a trocar at once and remove this accumulation of fluid that is keeping up a continued embarrassment of the circulation of the digestive organs, thereby giving these organs the opportunity to perform their functions properly? It seems to me the answer is apparent. There has, however, been considerable discussion with reference to the proper time for the performance of the operation. I have for some years past advocated early resort to this procedure. The more common practice is to postpone it as far as possible. I believe, however, that the sound practice is, the moment the patient suffers any inconvenience from distension, to withdraw the fluid by some mechanical means. It may be urged, in objection, that it will be necessary to repeat the operation when once performed; hence, it should be delayed until other means have failed to remove the fluid. After each tapping, however, there is a better opportunity for improving the general condition of your patient; so that, if it becomes necessary to repeat the operation, it can be borne much better than at first. It sometimes happens that paracentesis is performed

again and again, and the general condition steadily improves, so that finally the ascites does not return.

The *prognosis* is not so bad in many of these cases, for if the fluid is removed and the general condition of the system is so improved that it does not return, the condition of the liver may be one that can be tolerated for a long time.

(The operation was performed by the House Physician in the usual manner, and about twelve quarts of fluid removed from the peritoneal cavity.)

Clinical Reports.

(1) *Vanilla-Ice Poisoning*—(2) *Opium Poisoning*—(3) *Obstinate Priapism, followed by Impotence.* R. L. PAYNE, M. D., Lexington, N. C.

(1) **Vanilla-Ice Poisoning.**—On the night of July 2nd, 1876, during very warm weather, there was a tea-party in our town, at which were assembled seventeen of the *élite* of this community. The supper is said to have been splendid, and the ice-cream delightful; but unfortunately it was flavored with vanilla.

Between 1 and 2 o'clock the following morning, in less than an hour, I was summoned to see seven as severe cases of cholera morbus as I have ever seen since I have been a practitioner of medicine. Before 9 o'clock next morning, I visited three more cases, and heard of one other for whom I did not prescribe; making eleven persons sick out of the seventeen who were present at the party. Some of these were very severe cases, and I was fearful that several of them would die.

I was in a quandary as regards the treatment necessary. Was the cholera-morbus produced by the vanilla flavoring? Were these the symptoms of vanilla poisoning? I confess I did not know; but one thing I do know, that that night's experience will prevent me from indulging freely in vanilla ice-cream for years to come. I had no opportunity to analyze the ice-cream, and I never thought of the matter vomited until too late. The truth is, I thought most of the present relief of my patients. The disease seemed to be cholera-morbus. I treated it as such, and the patients all recovered.

The symptoms usually given of vanilla poisoning are, "gastralgia, severe vomiting, enteralgia, and diarrhoea." In addition to these, my patients had extreme thirst, cramps in the extremities, and frequent, feeble pulses. Their faces were pale, eyes

sunken and black underneath, and the collapse in four of the number was indeed most alarming.

I am sure that the sickness was produced by the ice-cream, because it was the only article of which they all partook.

(2) **Opium Poisoning.**—During the last year I have treated four cases of poisoning by opium. With respect to the first and second, there was nothing of special interest, except the fact, that I used belladonna as an antidote in both cases with good results. The third and fourth cases were especially interesting to me, and although one of them ended fatally, I will speak of them more in detail.

A lady by mistake gave her infant, four weeks old, one-fifth of a grain of sulphate of morphia. The dose was administered at 7 A. M., and I did not see the child until 11½ A. M. The little one was then completely narcotized. His extremities were cold, face livid, lips still darker, and pupils contracted to their smallest capacity. Anæsthesia was so complete that he gave no sign of sensation under the roughest kind of handling. The breathing was labored, and remarkably slow (even for opium narcosis) for a child of four weeks old, there being only eight respirations in a minute. When his position was changed, his head and limbs would fall about almost as limp as a dish-rag.

I attempted to give tinct. belladonna by the mouth; and by the rectum in strong coffee, but did not succeed; if the child swallowed at all, I could not perceive it, and the sphincter was so much relaxed that the enema passed away immediately. I had no atropia, but injected eight drops of tincture belladonna under the skin. In a very short while after the belladonna was so administered, the pupils were considerably dilated, the color of the face improved, the heart beat faster, and the respirations increased to fourteen per minute. Cold applications were kept constantly to the head, and warmth to the feet. Watching the breathing, the pulse, the pupils, and the appearance of the skin, I continued to give the belladonna, occasionally, for several hours; but although the pupils were largely dilated, there was no other sign of improvement in the symptoms. Late in the evening the breathing became more labored; in fact, everything indicated the near approach of death. Now, the child only respired four times in a minute. I next resorted to magneto-electricity, putting one handle over the nape of the neck, and the other over the ensiform cartilage and epigastrium. Immediately there was marked improvement in the breathing, the respirations being increased to fifteen, and the color was very much better.

This state of things continued for several hours, and I was

hopeful of its recovery; but suddenly the breathing became very slow again, and the infant's face almost black. Electricity would arouse it no longer, and the child died at midnight.

Two weeks ago, I was called to see another baby four weeks old, that had taken a teaspoonful of that famous miserable quack nostrum, Bull's Cough Syrup, instead of a dose of castor oil. In the printed directions on the bottle, the dose for a child a year old and under is from two to four drops. Of course, I have no knowledge of the component parts of nostrums, and do not covet more, except as a toxicologist; consequently, I was somewhat in a dilemma.

I found the child, one hour after the dose was taken, very stupid, with cold, or rather cool extremities, pupils contracted, blue about the lips and under the eyes, and respiring fourteen times to the minute. The child was in a comatose condition; yet the narcosis was by no means as profound as in the case above related. The symptoms all pointed to opium poisoning. I regarded it as such, and treated it accordingly. The case was first seen by me at 6 A. M., at which time it could still swallow, but swallowed very imperfectly. I gave several emetics, which it swallowed with great difficulty, and I tickled the fauces persistently with a feather, but utterly failed to produce emesis. Failing in this, my next resort was four drops of tincture of belladonna by the mouth, and ten drops by enema, given in very strong coffee. Applied mustard sinapisms to the spine, the extremities, and the pit of the stomach, and cold water to the head. After the expiration of an hour, the child swallowed with still greater difficulty, and the coma was more profound. I now gave six drops more of the tincture of belladonna, and after great trouble managed to make the child swallow the dose. In less than an hour after this, the pupils began to dilate, the respirations increased to twenty in the minute, and the color of the face and whole surface of the body was very greatly improved—in truth, a rose-colored flush somewhat suddenly overspread the entire surface, but was more apparent about the head and face. All the while the child was kept in constant, sudden, and what, under other circumstances, would have been painful motion. Frequently we gave strong coffee by enema. About 4 o'clock in the evening, I gave an enema of spirits of turpentine, which in a short while acted freely; after which I injected belladonna and coffee into the rectum again. At 5 o'clock the breathing was still better, and the little fellow swallowed with greater ease. At 6 o'clock, he took the breast feebly, from which time there was a gradual improvement until about 12 o'clock at night, when he cried lustily.

There are certain times when we doctors love to hear the babies cry—this was one of them! Since that time the baby has done very well, and I think the belladonna was chiefly instrumental in saving him.

(3) **Priapism and Impotence.**—Some eight months since a most remarkable case fell under my care—a case to me at least uncommon, if not unique.

When I first saw this patient he was suffering with a remittent attack, and while vomiting, had lost a considerable amount of blood from the stomach. This fever passed off readily in a few days under the use of quinine, and he seemed to have regained his usual health. About two weeks afterwards he sent for me again, and when I entered his room I found him sitting up, holding on with both hands to his penis, which was in a state of most intense, persistent, and *painfully tonic* priapism. He told me that the organ had been in this state all night, and that he was suffering most acute agony. He was well in all other respects, and assured me that he had not suffered from gonorrhœa, nor was there any evidence of it; the organ was not warped or crooked, as in chordee, but stood erect and straight. The patient was a married man, but he assured me that every effort at coition was not only futile, but added greatly to his suffering.

I prescribed sulphate of magnesia to open his bowels, and also opium and camphor, together with bromide of potassium, and chloral hydrate. And I directed him to use cold water freely locally; but in spite of all this medication, the organ continued *obstinately erect* for five days and five nights. I next gave morphia until the man slept soundly, but still the organ remained inflexible.

So long was this condition of things kept up, and so much was my patient exhausted by constant suffering, that I was fearful of his death.

I had just about concluded to resort to anæsthesia, and apply Esmarch's bandage to the incorrigible organ, when it fell; and great was its fall, because, apparently, "no sound shall awake it to glory again." For eight months it has been as completely collapsed as a dish-rag, with no sign of an erection. I have fed the patient well, have given him tonics, strychnia, phosphorus, and even cantharides, without any good result. His general health is remarkably good, but he has become morose, taciturn, and at times petulant.

The other day he came into my office and said, "Doctor, I am as well as I ever was in my life, but it, *it* is dead—'dead as a mackerel!'" To which I replied, "Perhaps you are correct in

your opinion; but if it is dead, when you call to remembrance those five days and nights of erection, you can but admit that *it died game.*"

Iodine in Post Partum Hæmorrhage. By Z. B. HERNDON, M. D., Richmond, Va.

On July 2d, 1876, Mrs. C., aged 19 years, was delivered of a dead child, after a tedious labor, during which her strength kept up until an hour or two before issue. Soon after removing the placenta, she swooned away, in consequence of immense loss of blood. Ergot was given in large doses by the mouth, and injected subcutaneously. Ice was used externally and internally. The hand was carried into the womb in the hope of producing contraction upon a large body. All of these measures failed to overcome the inertia, and from 10 P. M. until 2 A. M., when my syringe arrived, I had worked without seeing any benefit. The long nozzle of the instrument was carried to the fundus uteri, and 3vi tincture of iodine was injected. In an incredibly short space of time the uterus contracted firmly and permanently. For fourteen hours the patient remained in a state of collapse, though French brandy had been given *ad libitum*. Stimulants, with nourishment, after 48 hours, gave promise of a favorable result. Besides some tympanitis, with a moderate amount of soreness, no symptom of interest occurred, and, after three weeks, the patient left her bed, and in five weeks, went to the country for the summer.

Some six months before this, Mrs. J., æt. 35, a feeble lady, who had been under treatment for consumption for five years, gave birth to her eighth child. She soon sunk under profuse flooding. The usual remedies were resorted to, while a messenger went for my syringe. In half an hour, the iodine was introduced, and the trouble ended.

Uterine Polypi, with Unique Complications. By HENRY T. BAHNSEN, M. D., Salem, N. C.

Mrs. R., æt. 45, has, for eight or ten years, been troubled with a horribly offensive, profuse bloody and serous discharge from the vagina. Oftener than she could remember, putrid masses, varying in size from that of a hickory nut to that of her fist, and resembling wet tow in appearance, were expelled. The poor woman had almost become insane from the apparent hope-

lessness and horror of her situation. She was an object of aversion to herself and everybody around her, and was obliged to occupy a portion of the house removed from the apartments of her husband and children. Worst of all, she had been condemned to die, without examination, by her physicians. At the beginning of her trouble, she had observed severe, intermitting, expulsive pains—recently, none. This was the main point upon which I based my diagnosis of uterine polypus. There were no enlarged glands, but her appearance was cadaverous; weakness and emaciation extreme.

Upon examination, the vagina appeared filled with a half-sphacelated, shreddy mass, beyond which I could pass my finger only after etherizing my patient. So tightly was the vagina packed, that its posterior wall was lacerated in forcing my finger upwards. I managed to feel what I judged to be the os uteri above the tumor, and being unable to pass the ecraseur around it, I cut off with the scissors a segment, whose plane was on a line with the lower edge of the symphysis pubis and the promontory of the sacrum—guarding the points of the instrument carefully with my finger. This segment being taken away, left a firmer portion, which was easily brought under the symphysis. The pedicle extending into the uterine cavity was divided with the scissors. There was very little hæmorrhage, and without further treatment the patient recovered perfectly.

Sphacelation of uterine fibroids, causing expulsion of their entire mass is of rare occurrence. In this case, only the lower portion of the polypus was affected; and the partial sphacelation was of such frequent recurrence and long duration that I must regard the above description as unique in recorded gynæcological experience.

Miss S., æt. 38, after years of profuse vaginal discharge, mostly serous, but often bloody, had finally become almost bed-ridden. She was generally œdematous, and the urine contained so much albumen as almost to solidify upon the application of heat. A sessile intra-uterine polypus was easily diagnosed. It was of about the size and shape of a turkey's egg. The cervix being obliterated, slight lateral incisions of the os uteri enabled me to grasp the smaller end of the tumor with the vulsellum; but, upon traction, the instrument tore out. The capsule being thus ruptured, I removed the tumor and capsule piecemeal with my finger, vulsellum and forceps. The portions thus brought away were of a fatty appearance, granular and friable. There was scarcely any hæmorrhage, and under the use of iron the patient was speedily restored to health. In a month's time, all

œdema had disappeared, and no albumen was to be found in the urine.

Fatty degeneration frequently occurs in fibroid growths, and would seem to be a natural result of Nature's efforts to rid the system of such encumbrances. Albuminuria, even when most profuse and persistent, is not necessarily indicative of structural renal disease.

Phymosis, with Reflex Irritation, and Symptoms Simulating Stone in the Bladder. By HUGH M. TAYLOR, M. D., Richmond, Va.

Thomas, a little negro boy, æt. about 3 years, with the following usual symptoms of stone in the bladder, fell into my hands a few weeks ago. At my first visit, a very uncertain history could be obtained. He has never been strong and robust, but weak, fretful and nervous; lately his rest at night has been broken, and loss of flesh has been rapid. Since old enough to talk, he has complained of pains in the region of the bladder, and at the end of his penis, and during micturition—greatly increased towards its close. Sometimes the flow intermits, and he frequently wets his bed. He has frequent and painful erections; is constantly handling and “milking” his penis; his gait is very unsteady. A microscopic examination of his urine revealed no pus, blood, casts, nor any sign of renal complication, but mucous corpuscles, and well-defined, transparent, rhomboidal, uric-acid crystals.

Thinking the symptoms pointed clearly to stone, chloroform was administered by Mr. Wheat, Resident Student at the Central Lunatic Asylum, and I examined carefully every part of his bladder, first drawing off the urine, then injecting water into his bladder, and by frequently changing the position of his pelvis, hoped to dislodge the stone from any folds.

In introducing the sound, I discovered that the boy had phymosis, and adherent prepuce, the glans only free for a few lines back from the meatus—the preputial orifice hardly large enough to admit the beak of the sound. Not finding the stone, and with no history of stone in the family, nor any symptoms of worms, and having recently read in Dr. Sayre's late work the chapter on phymosis, and the reflex irritation which accompanies it, it occurred to me that the symptoms, so well defined in this case, might be of a reflex character.

Deeming any further manipulation at present inexpedient, I

determined to wait two weeks, at the end of which time, if the symptoms continued, to sound him again; and if a second time I failed to discover stone, to reduce the phymosis, and by so doing exclude the idea of reflex irritation, or cure him of all trouble. I found at the end of two weeks the symptoms much the same. The first sounding was followed by increase of vesical irritation and some urethral fever. Failing a second time to discover stone, I reduced the phymosis at once. This was easily accomplished by the usual process. Behind the corona, I found a ring of hardened sebaceous matter, closely adherent to and in the midst of an inflamed and almost ulcerated surface. This was removed, and instructions given the mother carefully to force back the prepuce behind the corona several times a day, each time washing the glans with tepid water. The reduction was almost immediately followed by a subsidence of the symptoms, and a marked improvement in his health, and when last heard from was well.

Correspondence.

Valentine's Meat-Juice in Diarrhœa.*

Dear Doctor,—The September number of your journal contains an article on the use of Valentine's Meat Juice [and Glycerin] in the diarrhœas of infants, which interested me very much. In June last, I had here a pair of children—twins—three weeks old, one of which was so exceedingly feeble and puny that, affected, as it was, with an exhaustive diarrhœa, neither its parents nor I thought it could be raised. The usual chalk powders, containing, in addition, $\frac{1}{12}$ th grain of calomel, were given, until the twins took three or four dozen. When these had all been given, the diarrhœa (still continuing) appeared to me to be due to debility and want of assimilation of food. Chalk, jalap, with tinctures of kino and of opium were given *pro re nata*, and ten drops of Valentine's Meat-Juice every three hours as nourishment. It is proper to say that the

*Since the publication of Dr. Mellhany's article in our September No., several of our private correspondents have incidentally referred approvingly to his recommendation. So rapidly cumulative seems to be the evidence in favor of the use of Mr. Valentine's preparations of Meat Juice as a remedy in exhaustive diarrhœas, etc., while yet comparatively little has been published concerning it, we have felt that we would be doing good service in making more prominent mention of some of the facts. We have, therefore, taken the liberty of selecting for publication the above extract from a private letter. Among other uses of this article, we also call attention to the recommendation of Dr. Scott, of Ohio. During the recent session of the International Medical Congress, while discussing the Treatment of Ulcer of the Stomach, when other methods of treatment have failed, he recommends the subcutaneous use of Valentine's Meat Juice, which is left to be absorbed. He has not seen ulceration follow this procedure, although he has used one or two fluid drachms hypodermically.—NOTE BY EDITOR.

mother was anæmic, and during the time took ale and iron thrice daily, while a wet nurse came twice daily to help to nurse the twins.

The improvement in the condition of the children (especially the girl, whose hands were about the size of an opossum's feet, and whose face was pinched or shrivelled like that of an old person, and whose wailing cry was so feeble as scarcely to be heard in the next room), was exceedingly rapid. The kino-chalk mixture and meat juice effected the cure. The children are now both fat and plump.

One of them, however, quite recently had a severe attack of cholera infantum. A few chalk powders, each containing $\frac{1}{3}$ d grain of calomel, given until the liver acted, as shown by dark-colored passages, and then the use of the meat juice and kino mixture, relieved the case perfectly.

My experience with this remedy is limited to a half dozen cases, and so far, the results are favorable. One of my medical friends to whom I read the article in your journal, and to whom I stated my experience, has three cases at this time on the meat juice. * * * *

From many years' experience in treating what is commonly called the "summer complaint of children"—infants, as well as teething children—I am confident that many are lost from our entire inability to nourish them properly. Not infrequently the diarrhœa is one of relaxation and debility—at least, it very soon becomes so, after the vomiting and purging of diarrhœa set in. A concentrated nourishment—one that is easily administered and quickly assimilated, always ready in the night hours—must prove especially valuable, particularly in our cities, where there are so many hand-raised children.

Very respectfully yours,

GEO. W. BRIGGS, M. D.

Suffolk, Va., September 8, 1876.

Philadelphia Medical Sketches—No. 1.

Mr. Editor,—As the title indicates, these articles are *outlines* only. They will present the special features of professional life in Philadelphia, the plan of the various charitable institu-

tions, and the line of treatment in each, and finally, the clinics, lectures, and personality of the most prominent members of the profession in this city.

Charitable institutions devoted to special departments of medicine are uncommon with us. The best—and in fact, so far as I am aware, the only example of such a dispensary—is the Nervous and Orthopedic Infirmary, situated on Seventeenth and Sumner streets. It is true several other dispensaries classify their work, having certain days for certain diseases; but the Infirmary above mentioned is restricted to nervous diseases and orthopedic surgery. The clinics for diseases of the nervous system are held on Monday, Wednesday, and Friday of each week, Dr. Weir Mitchell being the attending physician, assisted by Dr. Sinkler. The clinic is peculiarly rich in unique, important, and interesting cases, embracing large numbers of epileptic, choreic, neuralgic, and paralytic patients, in connection with a full share of the more rare neuroses.

From my notes, I find that in *Epilepsy* the chief reliance is upon large doses of bromide of potassium, long continued. The potash salt is used on account of its comparative cheapness. Dr. Mitchell, in private practice, very frequently prescribes bromide of lithium, a stronger but much more expensive salt. If the bromide treatment produces an eruption—quite a frequent and disagreeable effect of large doses—a few drops of Fowler's solution, *ter die*, are usually ordered. In my private practice, whenever using the bromides for any length of time, whether for epilepsy or spermatorrhœa, I advise the use of the arsenical solution, which thoroughly controls the tendency to the production of acne.

While upon the subject of bromides, I might mention an instance of *prolonged use of bromide of potassium* with an epileptic patient of mine. Doses varying from 30 to 60 grains were taken every night, *without a single omission*, for eleven months, and in this time no convulsion occurred, though previously fits opened nocturnally two or three times a month. The eruption caused by the drug was controlled by Fowler's solution. A brighter horizon now exists for this afflicted epileptic; but if something could be found to cure the attacks of "*pitit mal*," which bromide does not seem to control so well as it does the "*grand mal*," then, indeed, would a valuable mind and life be saved and brightened.

The usual plan of treating *Chorea* in this same institution is with Fowler's solution. The treatment is begun with 5 drops, *ter die*, and gradually increased until constitutional symptoms arise. I have the notes of a choreic girl, age 11, who was at the

time of her entry into the hospital taking 25 drops three times a day. Dr. Mitchell teaches that arsenic fails with some practitioners because of their fear to push the remedy. He says arsenic, in medicinal doses, so gradually affects the system that it can be withdrawn before any serious impression is produced, and that it is really safer than those drugs that suddenly depress or paralyze the heart. *Gelsemium* is found to be of no value in chorea. It was thoroughly tried in several cases, but finally abandoned, and the arsenical treatment instituted. If marked anæmia exists, wine of iron is also given.

I saw here also a case of pure uncomplicated *Aphasia*. The patient, a bar-tender, lost power to express himself freely, especially in the use of substantives. He was not able to tell his own occupation. He came to the Hospital quite often while improving under his antisiphilitic treatment (a clear, specific history having been made out), and it was amusing and interesting to notice the gradual improvement and the approach toward correctness in his trials to name his business: pfl—, flla—, pflar,— pftartender, are examples of his efforts.

Two Cases of Infantile Palsy, the affection being localized in one upper extremity.—CASE I.—Boy, æt. 19 months. The baby fell out of bed last Christmas, but did not appear to be injured. A few weeks after this, fever and a slight convulsion came on, followed by palsy of the *left arm*, all the other extremities remaining unaffected. The arm is wasted and slightly dropped from its socket.

CASE II.—A recent case. Female infant, age not ascertained. High fever came on suddenly a week ago, followed on the next day by paralysis of the *right arm*, all the other extremities, as in the case above, remaining sound. Cases of paralysis limited to an upper extremity are the most obstinate affections in this institution.

I have a similar report to that of Dr. W. H. Ross, of Mobile, mentioned in the MONTHLY, of *Supernumerary Fingers*—negro girl with six fingers on each hand. The baby's sister, mother, and grand parent were also thus "*made up*." The redundant members were easily removed. Each possessed two phalanges and a tiny nail, the third phalanx being represented by a ligament, by the medium of which attachment was made to the outer surface of the little finger.

Yours, &c.,

Philadelphia, Pa.

C. C. VANDERBECK.

Original Translations.

The Yellow Disease—Translation from the French. By J. W. A. WRIGHT, Green Springs, Ala.*

CHAPTER X.—GENERAL CONCLUSIONS.—I have reached the end of my clinical study on melanuric bilious fever, and I could stop here; but I have thought that it would be useful to condense in a few words the principal results of my labor.

CHAPTER I.—*Definition.*—Melanuric bilious fever is a pyrexia of variable type (intermittent, remittent or semi-continuous), characterized: 1st. By greenish, bilious vomitings, abundant and persistent. 2d, By a jaundiced color of the skin and of all the tissues; and 3d, By a peculiar brown or blackish tint of the urine.

Synonyms.—The disease has been called by various names, which should not be used indiscriminately, for fear of failing to establish definitely the real distinction between it and certain other diseases, especially yellow fever. The name *hæmaturic*

*NOTE TO EDITOR.—The following gives entire a careful translation of the closing chapter of the noted French work, *De la Fièvre Bilieuse Mélanurique des Pays Chauds, Comparée avec la Fièvre Jaune*, etc., by L. J. B. Béranger-Feraud, Chief Naval Surgeon of France, etc.

While recently in Europe, I procured, by request, a copy of this book for a medical friend, Dr. Elisha Young, of Greensboro, Alabama, in whose practice, as with most Southern physicians, numerous cases of the fatal Yellow Disease—identical with the melanuric bilious fever so graphically described by Feraud—have occurred of late years.

Dr. Young, learning from this excellent work its great value to every physician practising in regions subject to this terrible disease, and believing that hundreds of lives could be saved annually by a knowledge of the truths which this work condenses from a long experience and numerous cases, including many autopsies, suggested to me the translation of the entire work, with a view to its future publication, should sufficient demand for it be likely to justify such a step. Hence, I have undertaken it, in consultation with Dr. Young, and with his medical advice, though not myself a physician.

The last chapter is selected for your *Monthly*, because it presents, in brief, a thorough summary of the work by its author, almost amounting to a review, and will give your readers a correct idea of the thorough character and great value of the only complete treatise extant on this dangerous disease.

The book (450 pages, 12 mo., printed in Paris 1874) treats its subject exhaustively, giving in detail 42 cases and 16 *post mortem* examinations of patients who died from yellow disease and yellow fever.

It is a pleasure, in this connection, to acknowledge friendly aid from Dr. Wm. C. Avery, of Hale Co., Ala., in unraveling difficulties incident to French medical terms.

TRANSLATOR.

NOTE BY THE EDITOR.—We take special pleasure in giving prominence to this translation, and in commending the enterprise of the translator. *Hæmorrhagic Malarial Fever*, as the disease is better known among physicians in this country, has become one of the most important, especially to Southern and Southwestern practitioners, and it becomes them of all others to thoroughly acquaint themselves with the literature of the subject. We understand that the Translator has secured the services of experienced and accomplished physicians to add foot-notes to the translation, and even to append a chapter to the work, so as specially to represent the views of those of the leading physicians of this country who have become, by observation, familiar with the disease. In commending the work of the author, we may be permitted to extract the concluding sentence of an able review in the January number (1875), of the *American Journal of Medical Sciences*. The reviewer says: "M. Béranger Feraud deserves the thanks of the profession. Working in a country where the climate renders all exercise of the intellect difficult, and cut off from all books of reference, he has nevertheless produced a book which is one of the best of the kind we are acquainted with." The translation will be sold by subscription.

fever appears to me less happy than that of *melanuric*, because it involves the idea of the presence of blood in the urine. The name *melanuric*, implying only the idea of *black urine*, and prejudging in no respect the composition of the vesical fluid, seems to me preferable.

Plan of the Work.—This is a clinical work, written at the bedside of the patient, and makes no pretence to erudition; a work attempted 1st, For as exact a description as possible of the disease; 2d, To note the difference established between this disease and yellow fever.

This difference is of the first importance, as regards the question of the sanitary relations between different countries; for if it is proved that *melanuric fever* is absolutely distinct from yellow fever, and belongs purely to the group of malarial affections, the health officers of countries where it exists can conscientiously deliver clean bills of health to ships which leave port, and the health officers of Europe can, without fear, admit these ships to their ports.

CHAPTER II.—*Historical.*—It was first necessary to inquire when did *melanuric bilious fever* appear for the first time along the Senegal river; because we are led to suppose, by some authorities, that it is of a purely malarial nature; while others would have us believe that it is somewhat related to yellow fever.

For this inquiry, we had four sources of information: 1st, The records of St. Louis Hospital; 2d, Those of the posts along the Senegal river; 3d, Those of the hospital at Gorée; 4th, Those of the posts on the Gold Coast and the Gaboon river.*

The records of St. Louis Hospital show that from 1841 the *black urine* was noted, and that similarity in this instance and in others justify the belief that in 1820, 1825, 1830 and 1839 the disease was observed. The records of the posts along the Senegal furnish no additional information; but those of the hospital at Gorée lead us to think that what had been seen at St. Louis was observed there also at the above mentioned dates. Lastly, the records of the posts of the Gold Coast and the Gaboon show very clearly that from 1845, three years after their establishment, *melanuric bilious fever* was observed there.

The study of these various records shows us, on the one hand, that *melanuric bilious fever* has been, everywhere and always on the coast of Africa, of a definite type; on the other hand, that it has been influenced in no respect by the presence of yellow fever. We have seen how we can explain the greater frequency of the disease at certain times in the life of the colony,

*From the equator to 17° north lat.—TRANSLATOR.

without allowing the effect of yellow fever to interfere with the question. Finally, I have furnished two cases with *post mortem* examinations made at Gorée, with twenty-four hours interval, and showing very plainly the differences between melanuric bilious fever and yellow fever.

CHAPTER III.—*Pathological Anatomy*.—We have seen that its pathological anatomy furnishes exact indications as well for the specification of the disease properly so-called, as for its differential diagnosis when compared with other diseases.

1. *External Appearance*.—The color of the skin varies from a light to a dark yellow, according to the cases; it is of a perfectly uniform tint everywhere. We do not find, as in yellow fever, collections of blood and *ecchymoses* under the skin. The natural openings are unaffected, showing neither swelling nor a flow of blood. Rigidity of the dead body is very decided.

2. *Other Indications*.—The skull and the thorax present nothing pathognomonic. The stomach is perfectly sound, when the patient has not formed drunken habits; and the pungency of the mucus matter, which has been considered pathognomonic by some physicians, is positively nothing but the effect of alcoholic gastritis, entirely independent of the disease. The gastric fluid is green, limpid, or contains lumps of green matter, exactly like chopped spinach—a perfectly differential sign between the disease we are considering and yellow fever. The liver is very generally increased in size, its normal weight being some 1796 [?] grammes ($57\frac{3}{4}$ oz.). Its weight in melanuric bilious fever has been found by us to be about 2196 [?] grammes ($70\frac{2}{3}$ oz.). We have seen that its congested condition is special, and entirely different from the anæmic condition of the liver of yellow fever. The bile appeared to us to be very greatly increased in quantity, thicker than in its normal state, having a black color and a consistence which gave it the exact appearance of tar, or of *raisiné** too much cooked. We have presented in tabular form the differences between the liver in melanuric fever on the one side, and in yellow fever, or grave jaundice, on the other. The spleen appeared decidedly hypertrophied—its normal weight being some 235 grammes ($7\frac{1}{2}$ oz.). In this disease, we have found its average weight may be 760 grammes ($24\frac{1}{3}$ oz.)—a positive proof of the malarial nature of the affection. The loins presented also changes of texture in harmony with the period of the disease in which they were examined. Finally, the blood appeared to contain appreciable proportions of bile.

CHAPTER IV.—*Progress, Duration, Termination*.—In this important chapter we have seen first, that the disease never be-

*Preserves of grapes and pears mixed.—TRANSLATOR.

gins all at once, but that a person must reside for a certain time in swampy countries to be liable to contract it. The study of 185 detailed cases have led us to state that the chances of attack are in the following ratio :

1st year,	0.054—(5,4 per 100)
2d "	0.225—(22,5 " 100)
3d "	0.425—(42,5 " 100)
4th "	0.200—(20,0 " 100)
5th "	0.048—(4,8 " 100)

This table alone is in itself, perhaps, the most unanswerable proof that one can advance in the question of its differential diagnosis, when compared with yellow fever.

We have admitted the existence of one, two or three cursory attacks, preparing the patient for an attack which can be, 1st, Slight; 2d, Moderate; 3d, Grave; 4th, Malignant. We have also studied in detail its various grades, according to the symptoms, giving them according to detailed observations, and some analyses of urine of different cases. We have spoken of the duration of the disease according to the case, and have seen that the *slight* attack involves an average sojourn of 21 days in the hospital; the moderate, or *average* attack; from 28 to 35 days; the *grave* attack from 45 to 65 days for the cases which recovered, or from 5 to 30 days in the cases that died; the *malignant* form from 2 to 5 days.

As to the termination, recovery is the rule in the *slight* form, and death the rule in the *malignant* form; in the *average* form, recovery is very frequent, death is the exception; in the *grave* form, the chances for death are from 40 to 60 per cent.

CHAPTER V.—*Complications, Convalescence, Relapse, Gravity.* This chapter, which is the second part, and the sequel of the preceding, shows that the *malignant* form may be a fearful complication of melanuric fever in different degrees of intensity. As regards the complications which can occur during convalescence, we have shown that these are gastric troubles, intestinal disorders, dysentery, liver complaint, amblyopia, hemiplegia, etc. We have indicated the character and treatment of these various accidents, according to their development. Relapses have occupied our attention, and, in fine, we have studied under the pseudonym of *gravity*, the results attained by various surgeons in charge, or, in other words, the effects of various remedies employed against the disease.

CHAPTER VI.—*Etiology.*—In this chapter we first asked the following questions: A. What is the absolute and relative frequency of the disease in various countries on the coast of Africa? B. In what part of the year is it most prevalent in different countries? C. Are all races of men liable to contract it? D. Fi-

nally, do certain habits affecting health, certain excesses, certain changes of location, certain courses of medicine,—in a word, do certain conditions inherent in the life of the individual tend to produce it?

A. On the first point, we presented a table which shows the relative frequency of cases and of deaths from endemic affections in the various countries of the African Coast from the Senegal to the Gaboon—a table prepared from an estimate of a hundred men, and for one year. From this, we were able to deduce that on the Gaboon and the Gold Coast, from 38 to 50 per cent. are annually attacked with melanuric fever; on the upper Senegal, 20; on the Southern rivers, 15; on the Cayor, 8; and lastly, at St. Louis and Gorée, from 1 to 3.

B. As regards the time of the year when the disease is most frequent, we have given a table of details, the discussion of which has led us to state that the disease appears especially in the latter part of the year, from July to December, while it is least frequent from January to June, the very time when malaria is at its least.

C. To answer the question whether all races of men are liable to contract the disease, we have furnished two cases—one of a mulatto, the other a negro—which leaves no doubt; and, relying also on the information furnished by Dr. Villette, the chief physician of the colony in 1864, we have concluded that melanuric fever can attack all men without regard to race, when they are strangers to that part of Senegambia in which they are living.

D. Lastly, concerning the influence of the health and conditions inherent to the mode of life of individuals, we have seen that gross and imperfect food, excessive drink, the passing from a very hot country to one comparatively cool, or from a sickly place to a healthier point, exposure to the sun, the use of mercury, and laborious occupations, evidently predispose people to this disease, whose prime and essential cause is malaria.

We were then able to go farther into the question, and have reached as conclusions the following facts:

1st. The absolute frequency of melanuric bilious fever is rather moderate, since it varies from 1,5 to 5,3 (or 0.015 to 0.053) of all the patients combined in the various hospitals on the Western Coast of Africa.

2d. Its relative frequency is variable, according to location, and we may say that the countries in which tropical malaria is most intense, are those in which the disease is most frequent.

3d. As regards the time of the year when the disease is oftenest observed, melanuric bilious fever is a disease of the autumn and early part of winter, when the marshes have the greatest and most dangerous activity.

4th. We will add that, though Europeans may be attacked most frequently, yet, every one, whatever his race, can have melanuric bilious fever, when he has become deeply impregnated with malaria. Shall we say that the white man is the more impressible, which makes it especially true that he is oftener attacked than others by this disease?

5th. In conclusion, we will say that bad nourishment produces weakness; that excessive use of strong drink, becoming chilled, any sudden change of location (which acts only, perhaps, like becoming chilled), that mercurial treatment, and exposure to the sun, can all be considered as predisposing causes.

CHAPTER VII.—*Diagnosis*.—We have from the first observed that the diagnosis of melanuric bilious fever is divided into two very distinct kinds: A. The diagnosis, properly so-called, or absolute. B. The differential diagnosis between this disease and those which are liable to be confounded with it.

A. With reference to the absolute diagnosis, we have given the semiotic value of the jaundice, the vomitings, the black urine, the fæces, giving the chemical analysis of the products of excretion, which have been observed in the course of the disease. B. Concerning the differential diagnosis, we have seen how to avoid confounding melanuric bilious fever with either bilious fever not melanuric, or certain diseases of the liver, or grave jaundice, or, finally, yellow fever. This last point is evidently the most important; hence we have added to the considerations presented a table of the differential diagnosis of the two affections, where the symptoms are passed in review one by one, and distinguished in turn.

CHAPTER VIII.—*Prognosis*.—We have said some things of prognostic value about the different phenomena which we observe in the course of the disease, a task to which we had already given some attention in speaking of its progress, duration and complications; consequently on this head we have been very brief.

CHAPTER IX.—*Treatment*.—At length we have arrived at the chapter, important above all others, from a practical point of view—a chapter in which we had to indicate the course of treatment which seemed to us the most efficacious in curing the disease.

It seems reasonable, *à priori*, to admit that quinine and the evacuants are the special means to use against melanuric bilious fever, which is characterized by attacks of fever and a very marked bilious condition. Physicians who have attended this disease, have oscillated towards either the first or the second of these therapeutic agents. I have sought to establish the fact, that quinine is the remedy of all others; that it may be almost

the exclusive remedy, in the febrile period of the attack, and that other means are only very secondary agents.

But for me to hope that my views will prevail in practice, had to prove that they rest upon well-observed facts; hence, I undertook the systematic discussion of the medical treatment of the different phases of the disease. The progress of the disease offering a very convenient method of explanation, I have taken it as the guide for my demonstration.

1. *Prodromic Stage*—I have said that in this period there are two indications: 1st, The cure of the bilious condition; 2d, The cure of the malarial infection. I have shown that the physician has two classes of means to employ against the bilious condition which impresses him from the arrival of the patient at the hospital: *a*, evacuants; *b*, opiates. (A) Among the evacuants, I have mentioned that an emetic is oftenest employed, though purgatives can be used in a number of instances. (B) I have devoted myself especially to the use of opiates for the purpose of checking the bilious condition, and I have shown that the idea was advanced by Dr. Hernandez, of Toulon, at the beginning of this century, and that it is found, in substance, in the remarkable treatise on Cinchona by M. Briquet. I have said that I made a long course of experiments on the employment of opiates against the bilious condition, and that after more than three hundred observations, I have become strongly convinced that we can most generally succeed by the use of opiates in the bilious condition at the beginning of the melanuric fever.

I have concluded that, if what I have learned in the books leads me to praise evacuants, what I have observed in a great number of cases leads me to use opiates.

As regards the cure of the malarial infection, the remedy to be applied is quinine; but there are some important questions to determine—that is, which one must know: (a) When must we employ quinine? (b) How must we employ it? (c) What size doses must we give?

(A) *When should we give quinine?* Just as soon as possible; that is to say, when a little quiet is restored to the stomach, caused by the calming effect which follows the emetic, or the use of the opiates.

(B) *How give the quinine?* I have shown that the solution and the powder can be tried by the mouth; that injections are useful, when the buccal passage is impossible. I have enlarged with very minute care on the precautions needed to assure the absorption of the febrifuge. I have incidentally condemned the use of pills, frictions and pomades of quinine, giving my reasons therefor.

(C) *In what dose give the quinine?* This third question is closely connected with the preceding one, and can be considered as its complement; for it is by carefully using the means for having the medicine absorbed that we can determine in an exact manner the doses which we ought to reach, and those which we should not exceed, be they more or less. Two to two and a half grammes daily, in slight attacks (30 to 38 grains); or three and a half grammes in more severe cases (about 50 grains); and I may add that the prescription is to be given with a liberal hand, and watch with close attention the real absorption of the doses prescribed during the febrile period.

2. *Febrile Stage.*—In this stage we have said that quinine is the heroic and only means, so to speak, which we must put to work with great persistence. We have quoted cases to show we can hope for a cure by resorting to it without hesitation; how there is reason to fear that we may be overcome by the disease, if we do not fight it with sufficient desperation—if I may use the expression—with this quinine. But that we may not forget the authorized means recommended heretofore, we have said that after the prescription of quinine, comes the prescription for the expulsion of the pill.

We have now reached the point where we must consider a medicine, calomel, which has enjoyed some repute in the treatment of the disease we are discussing. We have spoken at some length on the use of calomel. We have reviewed with all possible details the various ways in which it has been tried, arriving after this full discussion at the conclusion, that the calomel is an inefficient and dangerous medicine, not only in melanuric bilious fever, but also in all diseases of intertropical countries. I can only repeat here what I have said before with great care and minuteness of detail; but, with all my power, call the attention of practitioners to this question. If my ideas were adopted, calomel would be positively excluded from the treatment of all tropical diseases.

Means to be Employed against the Secondary Symptoms of the Febrile Period.—After having spoken of the utility of opiates and quinine, after having censured calomel, which I should like to see disappear from the dispensatory of hot countries, it was necessary to complete my study of the treatment of the febrile period of melanuric fever by enumerating the means which a physician can try against pains in the stomach, liver, loins or kidneys, and the vomitings.

A. *Gastralgia, Hepatalgia, Lumbar, Renal, or Hypogastric Pains.*—Cataplasms, emollients, sinapisms, embrocations of oil, a blister placed upon the epigastrium or hypochondrium. Do

not make the application over the loins, where it will meanwhile reach the pains well enough, because of the habitual position in bed. By alternating with sinapisms, and poultices moistened with laudanum, we can sometimes obtain good results.

B. *Vomitings*.—I have told how the success of means used to check the vomitings depends on certain contingencies. We must not forget that febrifuges which reach the febrile condition—the attack, properly speaking, which is the cause of the vomitings—are altogether the best means of relief. As these retchings not only form an extremely painful condition, but even at times positively resist the absorption, first of the medicine and afterwards of food; as all delay in the use of these medicines becomes a great danger in the febrile period, so that the low diet in the weak period exposes the patient to extreme debility, it became my duty to learn the means of removing the difficulty, and I have studied the means of causing either medicines or nourishments to be absorbed through the rectal passage; giving the indications very carefully, so that this application may be made with the safety and precision which are necessary to give hope of success.

3. *Adynamic Stage*.—We have said that in a slight attack, convalescence follows the fever with but little interval, so that there are only some hygienic precautions and the continuance of some doses of quinine, which are then indicated. But too often the attack is more serious, and in this case let us not forget that the treatment of the passing period is very delicate; in this sense, that any hesitation or forgetfulness or delay may retard or even prevent the cure.

We will not repeat here what we said just now touching the pains in the loins, hypogastric and epigastric regions, and the vomitings. We felt it a duty, however, in this chapter on treatment to mention all the additional symptoms necessary. Our persistent reference to these secondary objects of attention ought, *à priori*, to prove what importance we attach to them. Indeed, permit me to add here that Dr. Cedont, who has had heretofore the best success, watches these secondary accidents with the most exact and earnest attention. There was also one case where I was able, thanks to such minute attentions, to cure an unfortunate man (Bouisson, case 41), who seemed irrevocably doomed to die.

You will excuse me from entering here into longer details as regards the cure of hiccough, of the state of prostration, of colics, constipation, gastric troubles, etc.; it would be useless to attempt to sum up what I have said already, and what is, besides, much condensed in the chapter on treatment.

I propose, then, merely to recall briefly what I said, when speaking of convalescence, against the abuse which is made of the wine of cinchona in hot malarial countries. We might well wish that this remedy, which is rather, if I may use the expression, a premium on the use of alcohol, could be employed with a more happy discrimination and much more sparingly than at present. I have spoken rather briefly, also, of the means of restoring vigor to the system: extract of cinchona, tannin, strychnine, arsenic, iron—all of which may be employed in the course of convalescence. I shall not repeat here; and permit me to conclude my reference to the treatment of this disease by saying, that a person who has been attacked by melanuric bilious fever ought to be removed as soon as possible from the hurtful influence of tropical countries, and sent back to France, where, under the double influence of the air of that country and the care of his family, he would recover his health, which would be very seriously compromised afterwards in the torrid regions.

Speculation Concerning the Disease.—In many chapters of this long treatise, I have felt it a duty to say something about the nature of the disease, and in spite of my wish to be sparing in speculations, I have been obliged to state my method of understanding the mechanical action of melanuric bilious fever, as follows: An affection of a malarial nature attacking debilitated persons, whose hepatic functions are depraved, and especially those addicted to the use of alcoholic stimulants. This, in brief, is a good part of my opinion of the disease we are examining. I would further define it, a malarial attack, semi-pernicious, or even pernicious, because of the excessive secretion of bile—a pernicious attack, *polycholeric*, if I may use the term. Such is the completion of my opinion about melanuric bilious fever; and since it has fallen to my lot to see many a recovery, it is this method of looking at the question which has forced me to my system of treatment at the bedside of my patients in Senegambia—the inspirers of this work, of which last page I am now writing.

I have multiplied, in the course of this study, the details, observations and inquiries concerning melanuric bilious fever, more perhaps than will seem necessary to those who will read it in Europe. This is because, after serving in our colonial list of officers, in the highest and lowest positions of medical authority, I have constantly thought, while writing this book, that it would be read especially by young naval surgeons, detached in the beginning of their career at dangerous and sickly posts, or on the scantily supplied advice-boats of our smaller fleets, having as their library a few condensed (?) classical works, recommending

to them as remedies only certain rare medicines; having as their assistants those who are but little instructed, or perhaps not all assiduous in their duties, and who too often are overcome themselves by the pernicious influence of the climate, against which they seek to protect those alike exposed. If my investigation should appear to them useful and of some value, it will have received the approval of those for whom it was especially written.

Translations from the French. By L. S. JOYNES, M. D., Richmond, Va.

Removal of the Inverted Uterus by means of the Elastic Ligature.—Professor A. Courty, of Montpellier, reports (*Annales de Gynécologie*, Sept., 1876) two cases of chronic and irreducible inversion of the uterus, in which the elastic ligature was employed with complete success for the ablation of the displaced organ—in one case by himself, in the other by Dr. Artes. Prof. C. regards this method of operation as preferable to the simple ligature, the galvano-caustic, or the *écraseur*. In one of the cases reported, the detachment of the uterus was completed on the fourteenth day; in the other, on the twelfth.

The same journal quotes from an Italian contemporary a case of polypus uteri, in which the same method of operation was resorted to with favorable results, the section of the pedicle having been completed on the seventh day.

The Constitutional Nature and Treatment of Fissures of the Nipple.—Dr. LeDiberder, physician-in-chief to the Hospital of Lorient, is of opinion that the frequent (or rather general) failure of local treatment for this distressing affliction of nursing women is to be found in the fact that "*the fissures are not the only trouble: they are only a manifestation of a general disorder very common in the puerperal state.*" The appearance of fissures is soon followed by febrile symptoms; the pulse becomes frequent, the skin hot; there is marked thirst and general lassitude, and sweating terminates the febrile paroxysm. It will be fortunate if, under the influence of these paroxysms, "which assume a type *distinctly periodical*, with shorter and shorter intervals, the local affection does not pass into engorgement of the breast, terminating in abscess.

"In any event, the fissures being the consequence of a pathological condition, which is betrayed (or is about to be betrayed) by paroxysms of fever, the treatment indicated thereby will necessarily be the employment of febrifuges. In other words, fissures of the nipple are *in the highest degree amenable to quinine*. It is now thirty years since I began to apply these prin-

ciples in practice. I have always seen speedy improvement follow the administration of quinine, and the cure is rapid—in from three to five days. It is, of course, more rapid as the treatment is more promptly begun.”

The author relates four cases in illustration. In two of these, as soon as the fissures made their appearance, with the attendant feverishness, he prescribed 40 centigrammes (about 6 grains) of sulphate of quinine early in the morning, and a like dose at half-past ten o'clock A. M. In the other two cases the doses were rather smaller, but the periods of administration the same. These doses being kept up until decided improvement had taken place, the quinine was then continued in smaller doses until the cure was completed. The results of this treatment in all the cases reported seem to have been all that could have been desired. Local treatment was not altogether omitted, though regarded by the author as of secondary importance. He generally directed poultices, either of starch or linseed meal, or some one of the washes or salves which have become popularized in French practice. (*Annales de Gynécologie*, Sept., 1876.)

Ergot as a Preventive of After-Pains.—Dr. LeDiberder, in the paper last noticed, remarks that, in order to prevent after-pains, he is in the habit of giving ergot directly after the expulsion of the placenta, with the object of bringing about a firm and persistent contraction of the uterus, in lieu of those alternate relaxations and contractions by which after-pains are produced. He orders a two-ounce mixture containing 2 grammes (3ss) of freshly-powdered ergot, of which he directs a tablespoonful every ten minutes until the whole has been taken.

We learn that Dr. Marion Sims, the skillful American surgeon, is at present in Paris, and that he proposes to perform in the hospitals some of the operations with which he has enriched the surgery of our time. (*Annales de Gynécologie*, Sept., 1876.)

Proceedings of Societies.

AMERICAN GYNECOLOGICAL SOCIETY.

First Day—Morning Session.—The Society met at the Hall of the New York Academy of Medicine, September 13, 1876. The President, Dr. Fordyce Barker, of New York, called the meeting to order; Dr. Chadwick, of Boston, Secretary.

Dr. Addis Emmet, of New York, read a paper on the **Etymology of Uterine Flexures, with the Proper Mode of Treatment Indicated.** This paper gives the results of a careful study

of the pelvic organs of the female, beginning at the commencement of menstrual life. The results justified the conclusion that the origin varied in different cases of flexure; hence the treatment, if intelligent, should be varied accordingly. Observation had been made upon 345 cases of different forms of flexures in his private hospital, and the tabulated statistics of 2,447 cases of different diseases and injuries peculiar to women, were used by him as a standard for comparison. With reference to flexures, Dr. E. took the position that there were two classes of cases; One in which the flexure was below the vaginal junction, was a congenital condition, and the pain, if present, was most severe before the flow. In some of these cases there was no suffering, as the congestion of the cervix straightened the canal sufficiently to permit an unobstructed discharge of fluid from the uterine cavity. In these congenital cases, the operation of incision was beneficial, and could be most advantageously made by means of scissors. The subsequent treatment should be both local and constitutional. The incision must be kept from uniting. It was beneficial, because the circular fibres were severed, and the longitudinal ones would draw the neck back, thereby assisting to render the canal permanently straightened. In the other class, the flexure involved the body of the organ to a greater or lesser extent; was above the vaginal junction, and due to obstructed circulation; occurred at some date subsequent to puberty; was due to a variety of causes; might follow impregnation; and in those cases the pain was during the flow. In such cases local treatment was to be instituted first, and continued until the case was cured, before the operation of incision was performed. Dr. E. regarded incision before the congestion and inflammation had been removed, as malpractice. By hot vaginal injections, local applications to the uterine canal and the use of glycerine in the vagina, etc.; by daily lifting the organ up to the health line with the finger, etc., the case was to be cured. When a flexure had been of long standing, loss of tissue often took place at the angle, so that a permanent deformity remained, as after caries of the spine. At the the close of the treatment, to allow of free escape from the canal, an incision, both through the posterior lip and at the angle of the flexure, would be eminently proper. In all cases when there was doubt whether the flexure was confined to the neck or involved the body, be very careful before proceeding with the operation. The doctor does not divide the cervix laterally, except in the treatment of fibroids or for the opening of a partially closed os, and does not extend the incision beyond the crown of the os. The paper was received with great favor.

Dr. Peaslee remarked that he had sanctioned Dr. Emmet's practice as far as was possible, and he was very happy to have the opportunity to make that statement, because he had been misunderstood upon this subject. He had been supposed by some to take the ground that discission of the cervix uteri should never be performed in any case of flexion. Dr. P. then read from a printed copy of his paper, "I know of no other condition in which bilateral discission alone is justifiable, etc., . . . but in such cases the incision should be closed as soon as the fibroid is removed. Posterior discission was first performed by Dr. Sims, but he became so dissatisfied with it that he entirely discarded it, and Dr. Emmet took it up and has shown its real value." It had been supposed by some that he claimed priority in the use of the superficial incision of the cervix uteri. He disclaimed this entirely, and had spoken of it as a method and nothing more, and called it superficial trachelotomy. The superficial incision, however, he had defended, on scientific grounds, as more beneficial than the deep, and in that respect, perhaps, he was entitled to the claim of priority. He was, however, above all personal consideration in the matter, and hoped that every person would criticise the paper as severely as he might deem proper.

Dr. Robert Barnes, of London, with regard to the opinion expressed in the paper that many cases of flexure began as retroversion, and became cases of retroflexion about the age of puberty, believed it to be a difficult point to decide, for the reason that opportunities for examining patients to settle this question were very rare. He was satisfied that many cases of flexure were congenital, but he could hardly understand how they began as cases of retroversion and subsequently became cases of retroflexion. He maintained in many cases there was no retroflexion to contend with; that there was nothing more present than stenosis, associated, it might be, with some degree of ante-flexion, scarcely more than normal, however, and which disappeared after division of the cervix uteri for the cure of the stenosis. The decided opinion was expressed that, practically stenosis of the os internum did not occur, for he had never met with a case in which the sound could not be easily passed; he regarded that as evidence that nature had provided sufficient opening for the escape of the menstrual fluid. But in a great majority of cases, there was closure of the external os, and the dysmenorrhœa would be relieved by enlarging that opening. If flexion was present to some extent, it would be relieved by the same operation. The pain in those cases began at the commencement of the flow, because the fluid could not easily escape, and

such a condition was found not only in married but single women. Incision of the cervix was a dangerous operation, and it should be performed with great care. Division of the os externum, however, could be easily accomplished with the scissors, need not extend as far back as the vaginal junction, and was competent to relieve one of the most distressing conditions to which women were subjected. In some instances a certain amount of retraction might follow, and it might be necessary to repeat the operation, but success usually attended the first cutting. The operation, although simple, required previous preparation of the patient. The woman should not be allowed to leave her bed within a week. The uterus, like other organs, required rest after being subjected to operation, and even after this modified form he had seen three fatal cases. In two of those cases, however, there were disturbing causes present which should not have been permitted.

Dr. J. P. White, of Buffalo, thought Dr. Emmet had given too little attention to stenosis of the cervical canal. True, it often depended upon flexion, but according to his own observation it existed independent of flexion. But if flexion was present there was at the same time positive stenosis associated with it. The condition was productive of great pain and dysmenorrhœa. For its relief he had found no treatment to be compared with operative procedure upon the neck of the uterus. He made the bilateral incision more often than any other, especially where there was simple stenosis, and perhaps somewhat deeper than the superficial incision recommended by Dr. Peaslee. For that purpose he employed a small knife, something like a tenotomy knife, with a long handle, and believed it to be better than any instrument arranged to cut a certain depth. After the incision had been made, the important part of the treatment was to keep the canal dilated. Immediately after the operation, a piece of cotton might be introduced; but permanent dilatation could be effected by the daily use of an instrument, constructed very much upon the plan of the common glove-stretcher. The blades of the instrument were thin and yielding, and could do no injury. Almost all cases of dysmenorrhœa could be immensely relieved by that operative procedure, and a very large proportion previously sterile became fruitful. The Doctor urged that such procedure should be instituted early. He did not wait to first cure the case and then perform the operation; he made the operation, and expected the cure of the case to go on *pari passu* with it, whenever the dysmenorrhœa depended upon any of the conditions to which allusion had been made.

Dr. Howard, of Baltimore, entered a criticism upon Dr. Peas-

lee's paper, to the effect that Dr. Sims had long ago abandoned the bilateral incision of the cervix, which Dr. Peaslee had criticised as a dangerous operation, except in the removal of fibroids, when Dr. P. himself resorts to it. His experience agreed with Dr. White's with regard to stenosis of the os internum; he had seen a case within a few months where the opening was so small that it would not admit more than the smallest pocket-probe. The narrowing was produced by the use of nitrate of silver. Of late he had used Dr. Peaslee's instrument, and success had followed the operation in only a few instances. He had kept the cervix dilated with cotton until the wounds had nearly healed, and then used Dr. P's instrument for dilatation; the cure had been continued in one case for about three months. In that case, he introduced a sea-tangle tent, and effected sufficient dilatation to give some relief, but latterly the trouble had returned. His experience had been that there was an almost uniform tendency to contraction when the operation was performed with Simpson's instrument. He had the same experience with the bilateral incision or Dr. Emmet's method, and it was for that reason that Dr. E. objected to it. Dr. Peaslee, on the other hand, objected to the operation because the edges of the wound remained gaping. He had seen but few cases in which the os externum had been the seat of stricture. His experience corroborated that of Dr. Emmet, that this condition was almost always congenital. He also agreed with Dr. White, that flexure, at the os internum was accompanied by congenital stenosis, and in some cases which had fallen under his observation the narrowing had been extreme. The stricture was at the os internum, and was not due simply to flexure, although in some cases flexure accompanied it. The occurrence of pelvic cellulitis and peritonitis, in some cases, was believed to be unavoidable.

Dr. Isaac E. Taylor, of New York, recommended that in certain chronic cases, in which the tissues of the neck and body had become dense and indurated, instead of incision, amputation of the cervix should be performed. It might be presupposed that it would be a serious operation, but in his experience it had not been; the after-treatment had been simply to use warm water injections and keep the woman in bed for two or three weeks. Amputation of the cervix permitted the uterus to assume a better position, and the functions of the organ could be performed more properly. He also maintained that the cervix would be reproduced, just the same as reproduction of the tonsils after excision, and that the new cervix would be changed both in form and structure. He denied the existence of longitudinal fibres of the cervix; hence the retraction mentioned by

Dr. Emmet could not take place, that is, dependent upon the action of such fibres. With regard to the occurrence of conception after amputation of the cervix, he believed the prospect to be better than after the posterior operation.

Dr. Wilson, of Baltimore, remarked that he had amputated the cervix a number of times, and in no case had conception followed. His operations had all been for the relief of procidentia. With regard to incision, he had no serious trouble from hæmorrhage, notwithstanding he had cut the circular artery four or five times. He had had one case of cellulitis and one of peritonitis after 75 or 80 operations. With regard to stricture of the os externum, he had not seen more than two or three cases, except when caustics had formerly been employed. He was not able to recall a single case in which he had found contraction at the internal os without flexure. He had been accustomed to make the incision to such an extent as to allow liberally for contraction, and after five or six days, had maintained dilatation by means of Nott's dilator. He had never performed the bilateral incision.

Dr. Howard inquired how amputation of the cervix could relieve the stricture when seated above. Dr. Taylor replied that the changes effected in the remaining portion by the operation would be sufficient to relieve it. The operation set up a new and derivative action, and the cervix which was produced did not contract, was closed, and had a perfectly free mucous membrane.

Dr. Byrne, of Brooklyn, remarked that he had amputated the cervix 39 times, and to his certain knowledge pregnancy had followed in three instances, and doubtless in many more whose histories he had not been able to follow.

Dr. Taylor added three more to the number in which conception had followed the operation.

Dr. Chadwick, of Boston, was of the opinion that, when the cicatrix, following the superficial incision recommended by Dr. Peaslee had contracted, the calibre of the canal would be reduced to almost its previous condition.

Dr. Peaslee remarked with regard to the superficial incision that, if followed by proper dilatation until healing was complete, there was but little tendency to contraction; by no means to the same extent as in the other operations. If there was actual stenosis, not produced by flexion, he would perform the operation; otherwise he would not.

Dr. Emmet had satisfied himself there were longitudinal fibres in the neck of the uterus. At all events the fact remained that the neck became shorter after the operation. With regard to

the other operation, in cases where congestion has been present, he expected more or less of contraction to follow; but he did not resort to it until all congestion had been removed by some means. If the uterus was heavy and sagged into the pelvis, it must be lifted up; if the vessels are congested, that condition must be treated; and if retroversion is present, the uterus must be put into position, even into the anteverted position; for he did not regard anteversion as a malposition. When the circulation had become so relieved that it could go on without obstruction, the uterus would get smaller; and when all symptoms of congestion had subsided, the operation might be performed.

Afternoon.—Dr. A. C. Skene, of Brooklyn, read a paper on **Cicatrices of the Cervix Uteri and Vagina**. The object of the paper was simply to notice the subject in order that it might open the discussion. He advised immediate closure of lacerations by means of the silver wire sutures. If necessary to use caustics, a portion of the mucous membrane should be left untouched, if possible, so that the eschar would not completely circumscribe the canal. The chief indications in treatment were to relieve pain and tenderness, prevent contractions and correct deformities. These requirements could be most perfectly fulfilled by removing the entire cicatrix and obtaining as nearly immediate union as possible. Such procedure, however, was not always practicable. Excision should not be undertaken in any case unless the scar was movable. A scar could be prevented from shortening by dividing it in one or more places, and then keeping the cut surfaces apart by means of a tampon or pessary. In that way the scar was lengthened, while the process of narrowing still continued. When the cicatrix surrounded the os externum it should be divided perfectly on both sides of the cervix, and a sea-tangle tent worn until healing was complete; the tent should be sufficiently long to enter the os internum. The slippery-elm tampon, carbolized, was spoken highly of as a means of preventing contraction of cicatricial tissue in the vagina. To the pain and tenderness, incision sometimes gave immense relief. Tinctures of opium, aconite, and iodine combined was mentioned as a means for softening cicatrices.

Dr. Byford, of Chicago, spoke in favorable terms of the elm tampon. He related a case in which the vagina of a girl 14 years old became completely closed as the result of acute inflammation following scarlatina. The case was successfully treated so far as all the purposes required at that period of life demanded.

Dr. Emmet remarked that there was one important point which Dr. Skene had not touched upon—the effect upon the

nervous system produced by cicatrices. Probably very many of the neuralgias from which women suffer, when not due to anæmia, were due to the presence of cicatricial tissue. Dr. E. believed that a surgeon succeeded in treating uterine diseases in proportion to the small amount of cicatricial tissue he left behind. An erosion of the cervix might be cured, but the cervix may not have been benefited because of the cicatricial tissue that has been left. Unquestionably, as the tissue became dense, nerve filaments became involved. To such a condition an immense amount of the neuralgias was to be attributed, especially when the cicatrices were about the neck of the uterus and the urethra. In those cases where a cord-like band was present, he had followed the same principle mentioned by Dr. Skene, viz.: that of dividing the bands, and then placing the parts upon a stretch, instead of leaving them to heal undisturbed. Dr. E.'s plan had been to cut in six or eight places, separate the edges for a half inch or more, and then bring into the gap healthy tissue from the sides, to be secured by at least two sutures, for a single suture would not answer. To Dr. Sims, he believed, was due the idea of using the glass vaginal dilator, and it must be regarded as the most valuable means at our command for placing those parts upon the stretch.

Dr. E. W. Jenks, of Detroit, read a paper on **Viburnum Prunifolium: Its Uses in the Treatment of Diseases of Women**, and made special reference to its value as an agent for preventing abortion, especially the habitual variety. As a uterine sedative, its action was said to be as pronounced as that of ergot in producing uterine contraction. It was also serviceable in all uterine disorders characterized by a loss of blood. In menorrhagia and metrorrhagia depending upon constitutional conditions, it was especially applicable. The remedy had afforded marked relief in all forms of dysmenorrhœa, except the spasmodic or neuralgic, where it was not sufficiently sedative. The bark of the root was the preferable portion in making the fluid extract, which could be given in drachm doses three or four times a day.

Dr. Bates, of New York, remarked that viburnum was a drug largely employed by the Eclectics. He had used it to some extent, and was certain that it had prevented abortion, especially in cases where the accident had become habitual.

Dr. White, of Buffalo, had known that the remedy was used by the Eclectics, but he had had no confidence in it. He advocated its use, however, for a uterine sedative was certainly desirable. It was pretty well established that in a majority of cases habitual abortion depended upon disease of the ovum; how the drug could arrest that, he was not able to understand; still, it should be tried.

Dr. Jenks would not hesitate to take the remedy as a substitute for opium, and, indeed, regarded it as preferable. He had prescribed the drug empirically, and had no theory concerning its physiological action.

Dr. T. Parvin, of Indianapolis, reported a case of *Abnormal Menstruation*, in which the oozing of blood was from the lower lip and gums.

The Secretary read a paper from Dr. Horatio R. Storer, of Boston, on the **Importance of Uterine Ebb as a Factor in Uterine Surgery**. It was maintained that there was an ebb and flow in the female body, which should be regarded, if the greatest success was to be obtained in operations upon her pelvic organs. The different results obtained in similar cases did not depend altogether upon the surroundings or the operator, but there were at work other influences, the exact nature of which had not been reached. The selection of cases, and the employment of skilled assistants, went far towards securing good results; but even then patients would often perish. The uterine ebb was analogous to the ordinary periodicities manifested in the human body, occurred regularly like day and night on the tides, and should not be disregarded in surgical operations upon the pelvic organs. All things being equal, the most favorable time for performing operations upon the pelvic organs was about one week subsequent to the occurrence of the menses, or at a period corresponding to that as nearly as possible, in cases in which the catamenia were absent.

Dr. H. F. Campbell, of Augusta, Ga., remarked that he had operated in accordance with this principle for many years.

Second Day.—The President's inaugural address being in order, Dr. Barker delivered an able and interesting discourse, chiefly of interest to the organization.

A vote of thanks was extended to Dr. Barker.

Dr. Robert Barnes, of London, England, read a paper on **Some of the Relations of Pregnancy to General Pathology**. It had been too much the practice to detach the study of such phenomena as menstruation, ovulation, pregnancy, etc., from each other, and the influence which they exerted upon the general system. There had been a lack of comprehensive consideration in our studies. In many instances it was necessary to study the phenomena of disease, not only in the female, but the male organism, in order to fully understand its nature and manifestations. For example, if Bright's disease were studied alone in men, and in women outside of pregnancy, it might be inferred that organic change in the kidney was essential to albuminuria. Unless our study of this disease had been extended to the pregnant

woman, where we find that all the manifestations of the disease may be present, such a conclusion would be legitimate. The transition from physiological to pathological and back again is very rapid in pregnancy. The author glanced at some of the changes that had been found to occur in the blood, glandular, lymphatic, and nervous systems. In the blood the chemical changes were first noted, such as increase of fibrin, diminution of albumen, etc. The difference in time of coagulation was noted as bearing upon the question of thrombosis. Reference was made to the relations existing between the respiratory organs and the pregnant uterus, and the changes which take place in the exhalation from the lungs; consequently changes in the blood. The dynamics of the circulation were referred to, and the hint given that, could we determine beforehand, by the sphygmograph or other means, that the arterial tension was rising too high, we could with propriety undertake the removal of the pressure by drawing a little blood. The changes in the glandular system were noted, especially those occurring in the thyroid and spleen. The relation of enlargement of the spleen to ague and pregnancy constituted a broad field for study. Pregnancy might be regarded as a test for the cure of chorea. The glands of the neck might undergo a remarkable growth, and the woman suffer from hydrorrhœa. Excessive salivation was sometimes seen in pregnancy. There was probably a marked increase in the glands of the stomach to account for the vomiting of pregnancy. The work of the liver and kidneys was increased. Sugar in the urine in albuminuria occurring in pregnancy was not infrequent. The same factors were noted in puerperal eclampsia as were present in the spasms developed in a frog by strychnine, namely, exalted centric irritability, exaltation of the irritability by a poison in the blood, and eccentric irritation. Light might be thrown upon diseases of the eye by studying them in connection with pregnancy. A form of amaurosis was referred to which occurred in connection with pregnancy and disappeared when that condition passed away. In noting the changes occurring in the lymphatic system, the unusual activity of the glands and the vessels in removing superfluous material was mentioned, and the three factors found which favored the process of blood coagulations, namely, some degree of arrest in the circulation, a peculiar condition of the blood, notably excess of fibrin, and the introduction of some foreign material acting chemically as a precipitator of the fibrin. A field was then opened, the proper study of which might shed light upon the subject of thrombosis in general. The hæmorrhages of pregnancy were regarded as evidence of arterial tension, and might be only a sanitary meas-

ure. The Doctor noted the probable effects upon the nervous system in determining certain pigmentations.

Dr. Peaslee, after a few complimentary remarks, turned attention to the main proposition of the paper, with the statement that a careful study of special pathological conditions which accompanied and were brought about by utero-gestation, contributed largely to our knowledge of general pathology. For, when utero-gestation was going on, everything was made subservient to the development of the uterus and its contents. The functions of the body generally were modified. Ready acquiescence could be given to most of the statements made by Dr. Barnes, as "they have all been felt before, but ne'er so well expressed." Dr. Peaslee referred to the special nature of the paper as suggestive concerning certain conditions remaining after parturition, etc., and which he was pleased to denominate as *quasi* continued pregnancy. For example, when the uterus remained in a condition of sub-involution, or when it was in a condition of chronic passive congestion independent of utero-gestation, a condition was present which gave rise to more or less derangement of the liver, lungs, kidneys and stomach, a fact which should never be lost sight of while such conditions remained. As far as effects were concerned, such cases were cases of continued pregnancy. It should not be forgotten, however, that while in most instances the functions of the body were subordinated to the processes of utero-gestation, there were many cases in which the performance of the functions of the body was carried on perfectly; more so even than before the occurrence of pregnancy. The condition of the anæmic woman not infrequently was very greatly improved, and the phthisical woman might recover almost her usual strength, energy and color; while the plethoric woman is almost always not so well when in the pregnant condition. So the proposition was not uniformly true, but as a matter of general study it was a subject of the highest possible importance.

Dr. Lusk, of New York, was especially impressed with what had been said regarding the relation existing between malarial poisoning and pregnancy; the history of a case was related in which chill after chill occurred as soon as conception had taken place. The case resisted all treatment, and the chills did not disappear until parturition, after which they passed away spontaneously. Dr. Lusk was aware of the experiments that had been made showing that the blood became impoverished during pregnancy; but he believed that other experiments had shown that such was not uniformly the case, but on the other hand there was an actual increase in the volume of the red blood globules. In a large proportion of cases, however, the opposite

condition predominated. Dr. Lusk inquired whether any experiments had been made which proved that carbonic acid gas exerted a special influence in producing abortion; whether its isolated action had been established?

Dr. Richardson, of Boston, referred to a case in which a peculiar pigmentation occurred in the breast after incision at the edge of the areola for mammary abscess—the pigmentation following the line of the incision. He suggested the expediency of making the incision in such cases either quite within or entirely outside of the areola.

Dr. Noeggerath, of New York, spoke of the similarity which existed between epilepsy and eclampsia. Dr. Barnes had alluded to the fact that external irritation would give rise to eclampsia in a frog poisoned with strychnia, which would seem to establish the existence of an aura in eclampsia as well as in epilepsy. The Doctor related a case in which the application of ice to the neck immediately developed attacks of eclampsia.

Dr. Barnes remarked that the conditions Dr. Peaslee had mentioned were forcible illustrations and valuable, because they demonstrated that the true gynæcologist could not in reality be a specialist. True gynæcologists were the “all-around” practitioners. Dr. Lusk’s case was a confirming illustration of the fact that many conditions were developed in connection with pregnancy which would not yield to treatment, but which did disappear after parturition. Several instances were cited which seemed to prove that carbonic acid gas exerted a special influence in the production of abortion. It was also a well-established fact that the gas was a stimulant to inorganic muscular fibre.

The next paper was read by Dr. Byford, of Chicago, on the *Spontaneous and Artificial Disintegration of Fibrous Tumors of the Uterus*. The paper contained the history of three cases. In two, disintegration was believed to be due to ergot.

Afternoon.—Dr. T. Gaillard Thomas, of New York, read a paper on **Abdominal Pregnancy Treated by Gastrotomy**. The paper contained the report of a case, with comments. The discovery of the ovarian corpuscle in the fluid removed by tapping the abdomen, in the present instance, so far proved the unreliability of this aid in diagnosis. The placenta was left in situ; the external wound kept open, a drainage tube inserted, and antiseptic injection freely used, as symptoms of septicæmia developed. Within the fifth week the placenta, partially decomposed, appeared at the opening, and was removed. The child was well developed, but its death had been caused by a hair tightly encircling the funis. The peritoneum was so hypertrophied that

had not the doctor felt positive in his diagnosis, he probably would have been led to regard it as a peritoneum thickened from irritation and inflammation induced by the presence of an ovarian cyst, and proceeded to tear it off from the abdominal walls. Such procedure would have probably been followed by a fatal result. The following points were noted: The importance of early diagnosis; prompt surgical interference—not uniformly, but non-interference in certain cases would be criminal. No positive rule, however, with reference to the latter point could be laid down.

Dr. Barnes expressed the opinion that the ovarian corpuscle was an unsafe guide. He also believed that the placenta should remain unremoved, but did not feel quite so sure that the external wound should not be closed. The propriety of opening the wound upon the first development of symptoms of septicæmia was readily recognized. If the wound be closed, might not the process of decomposition be prevented, and the placenta removed by nature in some of those ways with which we are already more or less familiar?

Dr. Engelmann, of St. Louis, regarded the diagnosis of ovarian cysts by the presence of the so-called ovarian corpuscle as unreliable. This opinion was sustained by Dr. Chadwick. Dr. Drysdale, of Philadelphia, had never failed in making a correct diagnosis, when he had carefully applied the proper tests to the cell. He had made something over 1500 examinations. Dr. Byford's experience, as far as it went, corroborated Dr. Drysdale's.

Dr. Thomas remarked that he must do Dr. Drysdale the credit of making a correct diagnosis in every instance in which he had sent him fluid for examination, but that the best microscopists in New York had failed in numerous instances, and he had, therefore, come to regard the ovarian corpuscle as an unreliable aid in diagnosis. With regard to the propriety of leaving an opening for the escape of the placenta, he was fully convinced that it was the proper plan to pursue. The question was not whether nature would not remove it in some of her peculiar ways, but whether it would not be safer for the woman to have an opening for the discharge of detritus. He regarded the conclusion unsafe, that when the symptoms of septicæmia began to develop, an opening might then be made, for we could not be nearly so certain of reaching the *locus* from which poisonous material was passing out into the general system.

Dr. H. F. Campbell, of Augusta, Ga., presented the substance of a paper on *Pneumatic Self-Replacement in Dislocation of the Gravid Uterus*. The factors in his theory are: 1, Inversion of

gravity; 2, Draught of the viscera; and 3, External atmospheric pressure. The patient places herself in the knee-and-chest position, introduces a glass tube into the vagina, and the atmospheric pressure restores the displaced organ to its normal position. The Doctor related several cases illustrative of this plan of treatment.

Dr. Emmet spoke favorably of the method.

Dr. Mundé, independent of any knowledge of observations made by Drs. Emmet or Campbell, had effected replacement in one case by introducing a speculum into the vagina and then lifting up the perineum. His manipulations were not made originally for the purpose of effecting replacement by atmospheric pressure, but restoration of the uterus to its natural position occurred by that means while they were being made.

Dr. A. H. Smith, of Philadelphia, was unable to see what advantage temporary replacement by this means had over permanent replacement and retention by a properly fitting pessary.

Dr. Mundé had found it necessary, in large vaginæ and with heavy uteri, to give the body of the uterus an additional impulse, either by slightly pushing it up or by pulling up the neck with a tenaculum, perhaps by both; his experience had led him to believe that there were cases in which gravity and atmospheric pressure combined failed, unless aided by manual impulse as above described.

Dr. Campbell had not introduced this plan of replacement expecting it would take the place of the pessary, for he always carried those instruments in his pocket; but he had simply introduced it that patients might have some method at their command for effecting temporary replacement without being compelled to call in a physician. He regarded it as a method possessing special value for overcoming displacements in virgins.

Third Day—Morning.—The discussion of Dr. Byford's paper being the regular order of business, Dr. W. L. Atlee, of Philadelphia, was of the opinion that disintegration of uterine fibroids was confined to the submucous variety. In that form there was no doubt but that the capsule and mucous covering sometimes became inflamed and ulcerated, and that the uterus, either from stimulation or naturally, forced the tumor from its capsule into the cavity, and so out into the external world. The vitality of such tumors was not great, and when exposed to the atmosphere by rupture of the capsule, they took on a species of decay peculiar in character, like the decay of fruit, extending from one point to another, like the dry-rot in wood, until perhaps the greatest portion of the tumor had undergone such change. Many years ago he had adopted for this change a term given by

Liebig, viz.: *eremacausis*. When that condition was developed the tumor should be expelled rapidly or removed quickly by some artificial means, for if permitted to remain, there was great danger of systemic poisoning by absorption. It was regarded as a matter of great importance to remove the mass as soon as possible, and also to guard against ill effects upon the general system by means of antiseptic injections. The action of the uterus, without doubt, could be very much facilitated by the use of means calculated to stimulate uterine fibre; the most efficient of all such agents was ergot.

Dr. Goodell, of Philadelphia, referred to a case in which a fibroid, situated at the fundus, had complicated the puerperal condition by the profuse hæmorrhage it induced. The woman was reduced in the extreme, but by perseverance in the use of ergot, and measures calculated to preserve her strength, complete convalescence occurred at the end of three or four weeks; at the end of that time no tumor could be detected. Another case was related in which the tumor was situated at the fundus, and, it being found impossible to enucleate it, a small incision was made through the capsule. Ergot was then administered, and the tumor escaped in fragments, so that, at the end of six weeks, it was much reduced in size, and the woman had ceased to suffer from hæmorrhagic attacks, which previously had been very severe.

Dr. Drysdale called attention to the use of large doses of ergot in this class of cases. He had administered ʒss doses of Squibb's fluid extract three times a day for more than a year without producing any deleterious effects.

Dr. Emmet remarked that there were many cases of fibroids in which ergot did more harm than good, because the tumors were so situated that gravity could not aid in their expulsion. If gravity could not be brought to bear, the action of the ergot, so far as expulsion was concerned, would be inert.

Dr. Thomas remarked that the action of ergot under these circumstances was two-fold, and that the two should not be confounded. One unquestionably was that of causing expulsion of the tumor aided by gravity, and was available under circumstances where the tumor could be forced into the uterine cavity. On the other hand, Hildebrandt had shown that there was an entirely different action of ergot from the expulsive—an action which the drug exerted upon blood vessels in general; as in controlling hæmorrhages of various kinds—and was particularly potent upon interstitial tumors. Such action was by no means secondary in importance to the expulsive action of the drug.

Dr. Wilson inquired whether the use of half-ounce doses of

the fluid extract of ergot for months gave rise to pain that required the use of anodynes? Dr. Drysdale replied that when the pain became too severe the drug was discontinued, and then renewed when the pain had subsided.

Dr. E. Noeggerath, of New York, read a paper on **Latent Gonorrhœa, Especially with Regard to its Influence on Fertility in Women.** It was maintained that gonorrhœa, when once contracted, persisted for life in certain portions of the male genital organs, notwithstanding its apparent cure. It was believed that that fact explained, to some extent at least, why uterine disease was so prevalent in our large cities; why blooming girls faded so soon after marriage; why treatment of certain cases of uterine disease so often failed; and also why sterility was so prevalent. The germs of disease remained concealed, and when the proper conditions were presented, it burst forth in all its virulence, and was followed by the disastrous consequences to which allusion had been made.

Dr. Noeggerath's paper was criticised sharply by Drs. Engelmann, of St. Louis; Chadwick, of Boston; Trenholme, of Montreal; and Johnson, of Washington. Dr. Engelmann, however, remarked that he had noticed, at post-mortem, evidences of salpingitis in numerous cases which to him had heretofore been unexplained, nor had he attributed much value to them, but which, perhaps, could be explained in accordance with the theory set forth in Dr. N's paper. That condition had been seen especially in those cases in which gonorrhœa had been present at some previous time.

Afternoon.—Dr. Peaslee reported a case of **Solid Uterus Bipartitus; Both Ovaries Removed for the Relief of Epileptic Seizures Believed to Depend upon Ovarian Irritation**—The operation was performed through the abdominal wall. Fatal peritonitis ensued. The doctor, however, would not hesitate to recommend the same operation in another case surrounded by the same circumstances.

Dr. Trenholme, of Montreal, reported a successful operation for the removal of the non-enlarged ovaries in two cases. One was suprapubic, and the other vaginal.

Dr. Thomas reported three cases of so-called "normal ovariectomy." In the first, the ovary was removed through the vagina, and the patient recovered without serious symptoms. In the second, the ovaries were removed through the abdominal wall, and the patient made a good recovery so far as the operation was concerned, but the general condition of the patient was not improved. In the third case, an attempt was made to remove the ovary by way of the vagina, but old adhesions pre-

vented the completion of the operation in that direction, and the operation by abdominal section was then performed. The patient died of acute peritonitis at the end of fifty-six hours.

Dr. Noeggerath remarked that the microscopical examination of the ovaries in Dr. Thomas' second case disclosed the presence of Pacinian corpuscles. Now, if the ovarian nerves undergo such remarkable change, other nerves in the pelvic cavity may be affected by the same change, and, perhaps, that might explain why improvement did not, in some cases, follow the operation for the removal of the ovaries.

Dr. Peaslee wished to be understood as disapproving of normal ovariectomy, as generally understood by that term. In thus recommending the operation of removal of the ovaries, it would not be to avert mere physical suffering, but to prevent the woman from becoming idiotic, as in this case, through mental disturbances.

Dr. Emmet remarked that he would sanction the operation only in those cases in which epilepsy was present.

Dr. W. Goodell, of Philadelphia, read a paper entitled **Clinical Memoir on some of the Genital Lesions of Child-bed**. The objections commonly urged against early closure of perineal lacerations were considered, and the conclusion arrived at that the condition of the woman was very much improved by closing the rent at once, by means of silver-wire sutures. With regard to the best treatment for rupture of the recto-vaginal septum, he was not so certain. Many such ruptures escaped notice, because they close spontaneously.

Drs. Emmet, Campbell, Wilson and Skene favored immediate closure of perineal lacerations by means of silver-wire sutures.

Dr. Jenks would not expect union in cases where considerable manipulation of the parts had been necessary to effect delivery, if the parts were brought together immediately after the accident; but when the labor had been rapid, whether from forceps or naturally, good union had been invariably secured.

Dr. Howard remarked that he had been more successful with the primary than the secondary operation. His cases had also healed perfectly when united 2 or 3 hours after the accident; if he came in contact with a case twenty-four hours after the occurrence, he would not hesitate to unite the wound with sutures. In a majority of cases which he had left to nature and trusted to position to bring the edges of the laceration in contact, union had not taken place.

The President remarked that he differed from the majority of opinions that had been expressed.

A number of papers were read by title.

The officers of the Society for 1876 were re-elected, viz: President, Dr. Fordyce Barker; Vice-Presidents, Drs. W. L. Atlee, W. H. Byford; Secretary, Dr. J. R. Chadwick; Treasurer, Dr. Paul F. Mundé; Council, Drs. J. Marion Sims, Wm. Goodell, T. Parvin, Geo. H. Lyman. The Society adjourned to meet in Boston on the last Wednesday in May, 1877.—*American Jour. Obstet.*, Oct. 1876.

Book Notices, &c.

Transactions of the Medical Association of the State of Alabama, 29th Session, Mobile, April 11–13, 1876. Pp. 271.

For the past few years, the Transactions of this Society have been leading in value and interest the publications of any State Society in this country, notwithstanding the advantages of wealth, of hospitals, of public institutions, &c., in some of the wealthier States. No little of this success is due to the energy and ability displayed by the excellent Secretary, Dr. B. H. Riggs, of Selma. One good working officer, such as he is, often is the making of a society.

In the minutes, we find reference, by Dr. E. M. Vasser, of Selma, to the value of *pynanthemum tinifolium* in dyspepsia.

Dr. Jerome Cochran submitted an ordinance and memoranda in relation to fee bills, declaring it “unwise and impolitic in itself” “for county medical societies in this State to undertake, in any way, the regulation of charges for medical services;” discussion of this ordinance is postponed until the next session. “For myself,” said Dr. Cochran, “I have no hesitation to avow my own preference for the old common law system as being much nobler than the system of our American Statutes. As Sir Benjamin Brodie has expressed, ‘medicine is one of the noblest of the profession, but the worst of all possible trades;’ and whatever has a tendency to assimilate medicine to the level of the trades, has a tendency to demoralize it.” Days of study could not have enabled us to express our views more exactly than these words of the distinguished and earnest physician of the South.

Dr. E. D. McDaniel, of Camdem, was elected President; Birmingham, second Tuesday in April, 1877, place and time of meeting.

Dr. J. J. Dement, of Huntsville, delivered the *President's*

Annual Message, selecting as his subject, *Personal Hygiene*. He remarked, among other things, that the Medical Society of Alabama was the first to establish a special chair of Hygiene. He thinks the best means of improving the human race must be sought in the improvement of the health of women; and he is undoubtedly correct.

The "Seelye Prize Essay" on the *Pathology and Treatment of Bright's Disease*, was awarded to Dr. H. D. Schmidt, of Mobile, late of New Orleans. It covers eighty-one pages, and is illustrated by two microscopical drawings. It is an exceedingly able, valuable and interesting paper. The portion which treats of the relation of the disease to miasma as a cause, is especially important to the Southern physician. Many of the deductions are based upon personal study of cases. He reports two cases of spontaneous cure that have been observed by him.

The only other paper published in the volume is by Dr. R. D. Webb, of Livingston, on *Hæmorrhagic Malarial Fever*. It takes up about ninety-five pages; and is the best review of the subject that we know of. To attempt a discussion of any important point in this review, would lead us beyond our limits. Quinine is the medicine relied on.

This volume is a perfect model for other Society *Transactions*.

Editorial.

Medical Society of Virginia.—When we returned from the session held in Charlottesville October 17th, 18th and 19th, the printer had set in type so much other matter as not to leave room for a proper report of the proceedings. Even to get this note in this issue, we have been compelled to lay aside, until the next number, about 20 pages of matter already in type.

We may say, however, that never before in the history of the Society, was there a session during which more valuable papers were read; and if any of them are omitted from the Transactions, the omission will be due simply to the condition of the Treasury. Although the attendance during the session was smaller than usual, it was nevertheless as large as could reasonably have been expected in view of the depressed financial condition of the country, and the Centennial attractions in Philadelphia. As to hospitalities, the profession of the town of Charlottesville, of the University of Virginia, and of the county of Albemarle generally, each seemed determined that the visitors should have a delightful time, and they succeeded.

Dr. James L. Cabell, of the University of Virginia, was elected

President for the ensuing year. Petersburg was selected as the place of meeting—the exact time next fall being left to the decision of the Executive Committee, who will make due announcement after consultation with the local faculty. Dr. W. C. N. Randolph, of Charlottesville, was elected to deliver the Annual Address to the Public and Profession. The retiring President, Dr. F. D. Cunningham, was elected an Honorary Fellow. The President made the following appointments: To report at the next session on Advances in Anatomy and Physiology, Dr. F. D. Cunningham; on Chemistry, Pharmacy, Materia Medica and Therapeutics, Dr. J. S. Davis, of University of Va.; on Obstetrics and Diseases of Women and Children, Dr. Robert J. Preston, of Abingdon; on Surgery, Dr. James Dunn, of Petersburg; on Practice of Medicine, Dr. John S. Apperson, of Town House; on Hygiene and Public Health, Dr. L. S. Joynes, of Richmond. Special Reporter on Yellow Fever, Dr. Ro. B. Tunstall, of Norfolk. Dr. J. S. Wellford, of Richmond, was elected special reporter on the assorted cases of Poisoning by Iced Custards, etc.; Dr. John R. Page, of the University, was likewise elected special reporter on Epidemic and Zymotic Diseases of Animals. Dr. B. G. McPhail, Acting Post Surgeon U. S. Army at Fort Russell, W. T., was elected to report on the Climatic Influences and Health Resorts in the Western States and Territories. The reports from the above-named gentlemen, besides the usual number of voluntary papers, will give an unusual interest to the proceedings of the next session in Petersburg.

Our space permits only a few extracts from the reports of the session given in Richmond *Daily Dispatch*: A petition from the Richmond Academy was introduced asking the Society “to petition the Legislature in behalf of better provision for the services of those who may be called upon to give expert medical testimony.” The petition originated with Dr. L. S. Joynes, in the Richmond Academy of Medicine, and demands immediate attention. The Society endorsed it, and appointed a committee to press the matter.

The annual assessment per capita was fixed at \$2 until otherwise ordered.

The address of the President (Dr. F. D. Cunningham) recommended legislation favoring pecuniary provision for the State Board of Health, the establishment of a State Board of Medical Examiners, and the regulation of the sale of certain poisonous drugs. The recommendations were all approved.

Dr. J. S. Wellford read an able defense of chloroform as compared with other anæsthetics. Dr. A. M. Fauntleroy, of Staunton, presented an admirable report on Advance in Therapeutics. Dr. Wm. H. Taylor's (of Richmond) report on Advance in Pharmacy was exceedingly valuable. These were all sub-reports of the Committee of which Dr. J. W. Mallet, of the University of Va., was Chairman. This latter gentleman gave a most instructive lecture on the True Composition of the Alkaloids and of Albuminoid Bod-

ies. Dr. Benj. Blackford, of Lynchburg, presented the report on *Advance in Surgery*, which was well "up to the times." Dr. S. W. Carmichael, of Fredericksburg, forwarded his report on *Advance in Practice of Medicine*, which also was valuable. But without detracting from the merit attached to the papers above-named, Dr. Jas. L. Cabell's Report on Hygiene and Public Health was *the* paper of the session. Dr. W. D. Hooper, of Lynchburg, made several valuable surgical contributions, and gave a clinical lecture, as it were, on the Treatment of Fractures of the Lower Extremities by Sand-bags. Dr. W. C. Dabney, of Charlottesville, read an excellent paper on Some of the Disturbances of Nutrition Consecutive to Diseases and Injuries of the Nervous System, which, by request of the editor, will appear in an early number of the *Monthly*. Dr. Hume Field, of Dinwiddie county, forwarded an interesting report of a Case of Acute Rheumatism, which will also appear in an early issue of the *Monthly*.

The proposed bill for the Establishment of a State Board of Medical Examiners received much attention. Every one, of course, was in favor of it, the discussion being simply on the surest method of securing the desired legislation. It was finally determined that each individual member should make a personal appeal to his Legislative representative; or, when the plan was deemed preferable, the physicians were instructed to get up petitions which would necessarily compel representatives to enact the proposed bill.

Dr. Greenville Dowell, of Galveston, Texas, was present, and, by invitation, gave an entertaining and valuable lecture on Hernia. The surgical treatment of this condition by the special operation originated by the speaker, must soon become popular. No operation has met with such fortunate results. The whole subject is fully treated in a clear manner in a book he is now publishing on the subject of Hernia. We wish we had the space to speak more in detail of this address, but all interested will find a clearer description than we could possibly give in a brief report in the work now being published at the Medical Publication Office, 115 South Seventh street, Philadelphia.

Our space does not allow a longer report. It is hoped that the Transactions will be published by January, 1877.

The Physicians' Visiting List for 1877, of Messrs. Lindsay & Blakiston, Philadelphia, is now ready. The popularity which this list has attained makes it unnecessary to do more than announce that it is ready. This edition, however, contains an almanac of six months of 1878, which is of material service to those who have obstetric engagements after the new year.

The Arkansas State Medical Association, by order of the President, Dr. W. H. Barry, will *not* convene until Tuesday, April 24, 1877, at Hot Springs. Dr. J. H. Southall, Little Rock, Secty.

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Original Communications.

ART. I.—*Comparison of Cases of Progressive Muscular Atrophy, Syphilitic Brain Disease, Chronic Congestion of the Spinal Cord, and Locomotor Ataxy.* A Clinical Lecture Delivered at Bellevue Hospital, by W. H. THOMSON, M. D., Professor of Therapeutics, etc., in Medical Department of the University of the City of New York, etc. (Phonographically reported by a Special Reporter.)

At our last meeting, we saw a case of a peculiar kind of locomotion, but the man had weakness in the upper extremities, as well as in the lower—due to *progressive muscular atrophy*. The patient kept his eyes rather raised from the floor while walking; his unsteady gait was due to insufficient power in his muscles. In some respects, his locomotion was ataxic.

Two weeks ago, a case was presented in which there was marked unsteadiness of gait, but the man kept his eyes elevated while walking, and he had double vision and strabismus. Upon examination, the characteristic symptoms of locomotor ataxy were absent. His condition was dependent upon some disorder of the *brain*, probably pressure, inducing paralysis of the movements of the eye. His diplopia, therefore, was *fixed* in character, not changeable, as would be the case were it of the variety which is characteristic of locomotor ataxy. In the ataxic patient, the character of the double vision varies, because it depends upon want of muscular co-ordination; hence the images are seen sometimes one above the other; sometimes close together, but upon the same plane; sometimes considerably separated, etc. The

difficulty in this instance was believed to have a *syphilitic* origin. Anti-syphilitic treatment was adopted, and there has been moderate improvement.

Progressive muscular atrophy is one of the most incurable of all diseases. It comes on very gradually, and has fewer symptoms than any disease you can mention. The patient usually appears to be in good health, without indications of the fatal malady which is slowly undermining him. It comes on without numbness or tingling, without sensations referable to the spinal cord, such as tight bands about the body or extremities; the patient has no neuralgic, shooting pains; but he simply notices that his muscles are losing their power, and that they are peculiarly affected. The muscles are not attacked uniformly, but are affected singly or in individual groups, so that they occasionally present a very curious deformity. As you see here, the deltoid is very much atrophied, and the bone seems to be unnaturally protuberant; but just below, the brachialis anticus is of normal size, although it appears to be hypertrophied. This appearance is due to the fact that there is loss of substance in the neighboring muscles.

This disease seems to defy all treatment, yet in the early stage a certain line of treatment seems to delay its progress. The only two remedies which are worthy of consideration are nitrate of silver and phosphorus. Constant friction over the muscles, for the purpose of keeping up the circulation, will be of service. It is a good plan to faradize each affected muscle; this can be done, even though the muscle be no longer than an inch, if poles of the proper size are placed—one over the origin, and the other over the insertion of the muscle. There is no agent the effect of which can be so localized as electricity. Electricity increases the flow of arterial blood between the points to which the poles are applied. The muscles may be developed by faradism, as by exercise.

A third case gave the following history: He is a blacksmith; his trouble came on gradually; he first noticed a numbness in the feet, followed by a sensation of cold, which extended to the arms; his finger-nails were sore and his hands numb; he had a tired sensation in the back, with but little or no pain. There was no trouble about his vision. The weakness and numbness

continued until he was "taken sick," as he terms it; then he had some fever; the numbness grew notably worse; he had some nausea; and there was a sense of tightness about the abdomen. Paralysis of both lower and upper extremities became quite complete; with that there was a marked tendency to atrophy of the muscles, but it did not have the character of progressive muscular atrophy. It did not affect single muscles or entire groups of muscles, and leave others near them unaffected; but there was general muscular atrophy. It was not symmetrical, as in the progressive atrophy. The facts that the patient had complained of tightness about the body, that he had some fever at the time it appeared, and that he had been a blacksmith, led to the conclusion that the case was one of congestion, with effusion along the spinal cord. The condition of his pulse indicated that, for it has varied exceedingly—at one time being 60; at another 100; at another 50; but usually it has been very slow. Wasting of the muscles is quite as marked as in the man suffering from progressive muscular atrophy, but it does not present that selected character which belongs to the progressive form of disease. Moreover, this man complains of a sense of cold, numbness and tingling, while the patient with progressive muscular atrophy had no such sensations. Tingling is a positive symptom; it shows that the parts are suffering from want of arterial blood; and it is characteristic of about the worst affections which can occur to muscles. If you see a man who is suffering from gradual wasting of the muscles, with tingling, he has not progressive muscular atrophy. Another point in this man's history is that he has had a sensation of tightness about the body, which points directly to the spinal cord, and not to its membranes. A localized band which goes around the body and gives a sensation of tightness, tells us of myelitis, and not meningitis. A patient may have a meningo-myelitis, and in that event he will have a sensation as though a cord were tied around the body, but with that there will be pain upon moving the lower extremities; but a simple tightness about the body points to the spinal cord, and speaks of trouble induced by pressure. Such pressure may be from inflammation, or from a tumor, or from an effusion into the spinal canal.

This man has had weakness of the muscles of the upper and lower extremities, numbness and tingling, muscular atrophy, and,

in one place, a sense of tightness. The case is, therefore, regarded as one of *chronic congestion of the spinal marrow*, attended, perhaps, with some effusion, giving rise to pressure.

In accordance with this opinion, the man was leeches along the spine; that was followed by the use of the oleate of mercury, with the internal administration of phosphorus and nitrate of silver. The leeching was followed by an immediate improvement in the paralytic symptoms. From ten to twenty were applied each time, and repeated twice a week for nearly five months. The faradic current was also systematically employed, not to cure the spinal disease, for it cannot do it—it cannot reach the spinal cord or brain unless you bore a hole in the bony structure so as to carry the poles within; but it was used simply for the good effects that might be produced upon the muscles. The result has been that the patient, from being unable to help himself at all (the muscles so atrophied that the heads of the humeri were as prominent as in the case of progressive muscular atrophy just seen), is able to walk and use his arms with a good deal of freedom, and his fingers have recovered so that he is now able to write. His gait is unsteady, and movements of the arms in certain directions are somewhat restricted; but the man looks quite well, and there has been a steady and marked improvement. No medicine has been used for the purpose of promoting absorption of the effusion within the spinal canal. In order to arouse the spinal cord, he was burned a number of times with the hot glass rod upon each side of the spinal column.

Another case: This man's trouble began about a year ago, when he first noticed that he had double vision, which was of the *changeable* variety, and has remained so until the present time. As he walks, you will notice his heels touch the floor first, and the foot is drawn up fully, so as to make sure that the heel touches the floor first. He is unable to walk straight unless he keeps his eyes fixed upon the floor; and he falls almost at once after closing his eyes. We have, then, the important symptoms, and sufficient, to enable us to make a diagnosis, namely: the heel walking, inability to walk without directing his steps by the eye, and a *changeable double vision*. These are characteristic symptoms of *locomotor ataxy*. The symptoms of this disease are fluctuating in character—are constantly improving and then getting

worse. Hence, in its early stages it is rarely brought to the attention of the physician, because the patients think that the disturbances which they have are due to biliousness, or something equally unimportant. It is proper for you, therefore, when any one comes complaining of double vision, to examine further and determine its character. For the double vision peculiar to locomotor ataxy sometimes precedes the development of every other symptom by, perhaps, two years. As a rule, the unsteady gait is first noticed in the night; the patient finds himself unable to walk well, or not at all, in the dark. This may pass away, and re-appear, perhaps, at the end of a month, and so the disease may be of considerable standing when complaint is first made.

The man before us has suffered from a sense of tightness about the body at different places, and has also suffered from intense neuralgic pains in the legs—sometimes of shooting, and sometimes of a burning character—and these have been accompanied with a sensation of tightness just above the ankles. This is a favorite situation for these bands. The sensation of the skin, where the pain is most severe, is usually diminished or entirely gone. This patient has been suffering about three years, but is better than he was one year ago.

Before speaking of the treatment of locomotor ataxy, we have another patient here who gives unmistakable expression of the ataxic disease. There has, however, been no double vision in this case; no headache; but sharp, shooting pains, "like a streak of lightning," in the legs; a sort of band about the body which is nearly always felt in about the same place, but there has been no sense of tightness about the legs. There is no paralysis, and from first to last it has been a case of want of co-ordination of the muscles that has rendered every movement of the body uncertain. It is not a case of what has been called shaking palsy, for when the arm is stretched out at full length there is no trembling seen or felt in the arm, as there would be did it belong to that class of cases. Shaking of the arm never occurs in locomotor ataxy when the hand of the patient is grasped and his arm placed upon the stretch.

There are two ways besides in death, in which locomotor ataxy terminates. It may progress until a certain point is reached, and then stop, and the patient remain in that condition for years

—no worse, no better. Such cases, however, are uncommon, although they do occasionally occur. The other class of cases is that in which the patients get well. The fatal cases go straight down, daily getting worse in spite of any treatment which has, as yet, been employed. It is to be believed, however, that those cases which recover partially or entirely would have gotten worse had no treatment been given them. The effect produced by the disease is not upon the motor system at all. There is nothing in it of the character of those three cases given, in which there was wasting of the voluntary muscles and more or less of paralysis, as shown by the permanent strabismus developed in the case in which the trouble was supposed to be in the brain; and by the complete motor paralysis in the case of spinal congestion. The disease is not of a motor paralytic character, but affects the sensory elements in the muscles, and is accompanied with fatty degeneration—especially of the posterior roots of the spinal cord.

There is no sort of question but that the character of the disease is one of chronic neuritis; and a neuritis that is localized along the track of the nerve.

On that account, we may have a great deal of faith in the restorative action of the actual cautery, and it should be used in every case. These cases do not need leeching, because they are not sufficiently acute in character; but the actual cautery will be found to be of service, and it should be frequently and thoroughly applied. Electricity is absolutely useless, used in any form, and it aggravates the pain because it increases the excitability of the muscles. Hot water is very injurious; sedatives of any kind are injurious. On the other hand, such applications as produce a smarting, like red pepper, may be used, and sometimes they are beneficial, while at other times they are not. Lastly, we have a remedy that acts like a specific. The patients are certain to improve under its use, and it is a very annoying fact that, when the time arrives at which the remedy is capable of accomplishing most, it must be discontinued, for it cannot be continued more than two or three months at a time without producing discoloration of the skin. The remedy is nitrate of silver. It may be given in doses of one-third of a grain three times a day, and, in such doses, can commonly be continued for three

months without doing harm. There have been many cases, however, in which blackening of the skin has been produced in less than twelve weeks. At the end of that period of time, it should be discontinued, and oxide of zinc substituted. The oxide of zinc is far inferior to the nitrate of silver, but, as a substitute, it is the best we have at our command. The simultaneous use of belladonna with both of these remedies increases their efficacy.

ART. II.—*The Border-Land of Insanity—With Examples Selected from Among the Illustrious Insane.* (Being a Condensation of a Popular Lecture recently Delivered by Invitation at Different Places in North Carolina.) By EUGENE GRISSEM, M. D., Superintendent of the Insane Asylum of North Carolina, Raleigh.

[Continued from page 600, November No.]

The temptation to dwell upon the characteristics of those whom we may well term the illustrious insane may carry us too far, but in certain cases it is indispensable to the faithfulness of the picture, to portray the details thereof.

The case of the renowned Dean Swift I need not dwell upon. He was afflicted through life with vertigo—the result, he says, of cerebral congestion caused by eating a hundred golden pip-pins at one time. Irritable, strange, gloomy—at last he went months without speaking. His great cruelty, too, and extraordinary perfidy to the women who loved him, foreshadowed his future. St. Patrick's Hospital for lunatics was built and endowed by him for the people of Dublin, at a cost of eleven thousand pounds. This institution still exists, yearly working out its share of blessing, while its great founder moulders in the grave. For the last four or five years of his life he fell into a state of idiocy, locking his lips in the silence of the tomb.

The names of Johnson and Swift suggest that of Pope, whose fame will last as long as the *Universal Prayer* remains as it is, one of the most superb expressions of thought in our language. Is it possible that there was anything abnormal in the constitution of Alexander Pope, the friend of wits and statesmen, the keen satirist, and the model of English poetry for two generations? Dr. Johnson says Pope had disease of the stomach and liver, from which came absolute hypochondriasis.

"Feeble at the best, he finally required perpetual female attendance. So great was his sensibility to cold that he wore a fur doublet under a shirt of coarse woven linen. He was placed in a bodice of stiff canvass when he arose, and could hardly hold himself erect until it was laced. Then came a flannel waistcoat. His slender legs required three pairs of stockings, and he could not dress or undress without the help of the maid. Often he was a picture of misery complete—quarrelled with his friends; symptoms of pressure on the brain appeared, and he sighed for death to end his physical and mental agony. By the active medical aid of Sir Sam'l Garth alone was his mind restored to a healthy tone after these attacks.

"I cannot forbear to note a discovery of very recent date, that bears all the marks of an insane act. Prompted by the inordinate vanity that often appears in cerebral disease, he ardently desired to publish his correspondence during his own life-time, and determined to use the petty artifice of concealing the truth by making it appear that the publication was forced upon him through the unprincipled conduct of others, who, he pretended, gave to the public garbled fragments of it. He robbed himself of his own letters, conveyed them piecemeal and by feigned hands to the publishers, and accused others of the theft—among them Dean Swift, who was then imbecile and shut up from the world. Having prepared the literary circle for what he called his genuine correspondence, as published in his own name, he now wrote and gave forth a fictitious one; letters which his correspondents returned at his own request, were re-written, re-dated, and re-addressed to personages that seemed more likely to bring him credit."

Pope was a sickly boy, without brother or sister to correct his morbid tendencies; he grew up without healthy control, intensely self-conscious, petted, spoiled, vain, indelicate, even malignant, and perhaps the key-note of his life was that this puny skeleton was a parody of the men of the world and of pleasure about him.

But in the survey of the vast field before us, probably no fact will more astonish the casual reader than the constant and recurring proof of brain disease and abnormal organization in a long line of British poets for more than a century and a half just past.

To begin with Gray, the sweet singer, whose music echoes in our hearts. "The curfew tolls the knell of parting day." How rude the shock to know that this child of a father of violent pas-

sions and brutal manners, was a prey to feebleness, indolence, trivial derangements of mind and body, with numberless little affectations, absurdly sensitive, disputatious. He changed his home of twenty years (Peter House at Cambridge) on account of a silly joke of the college boys upon his peculiarities. His life passed in visions of immortal labors that never saw the light.

Darker and sadder was the fate of Collins, his contemporary—a lyric poet of the first rank, whose ode on the *Passions* is to-day in every choice selection wherever English is read. When first published, his works were unread and unappreciated. Receiving a legacy from a rich uncle, he paid voluntarily all the losses of the publisher, and burned the unsold edition. Insanity came on; he traveled to shake it off in foreign lands, but only to return to the lunatic asylum. Such as it was in that day, how terrible a home for such a spirit! Pathetic is the account of the scene at Islington. When Dr. Johnson visited him in its dreary wards, he was holding a book in his hand, having given up earthly hopes and fame; said he, with trembling speech: "I have but one book now, but it is the best." It was the New Testament. He died at thirty-six; and after he had gone, his odes steadily rose in esteem until, a hundred years after, they were pronounced the best in our literature. They have been said to partake of the enthusiasm of Tasso, the magic wildness of Shakspeare, the sublimity of Milton, and the pathos of Ossian. Too late, that judgment, for the fevered brain and the broken heart!

Next in time, but greater in importance, is William Cowper, the first of the modern school of poets—the bold genius who threw off the thraldoms of Pope and all the classical school; and in a single poem and almost in a day, revolutionized English thought, and prepared the era of Byron, Scott and Wordsworth. The delicate child of a Hertfordshire parson, he was articled as an attorney, but abandoned it. Twelve years he spent in the Temple. Appointed to a clerkship which required a public appearance in the House of Lords for one occasion only, he fancied the clerks against him, and was overcome in the struggle to fit himself for its duties. He hopes he will go mad or die, and in going mad, attempts to commit suicide. One time he will drown himself, but some one in the way prevents; he has the poison at his lips, but is interrupted; he tries to stab himself, and finally

does hang himself, but the garter breaks. For the time, the shock restores him. The office abandoned, the excuse of his insanity is religion. He is not one of the elect, and the angry eyes of the Almighty are forever watching him. For two years he is placed under restraint at St. Albans, under care of Dr. Cotton. For a time he loves his cousin, Theodora Cowper, but her father objects. "If you marry William Cowper, what will you do!" "Do, sir," the intrepid girl replied, "wash all day and go out to ride upon the great dog." She spent a lifetime faithful to Cowper, in loneliness and solitude, but he alas! forgot her in the selfishness—the intense self-consciousness of his life. In the words of a great writer,

"Beautiful and amiable as his character was, the capacity of strenuous loving might have been its salvation. A man who is able to throw himself into the existence of another, to seek with vehemence the welfare of another, has the strongest safeguard ever given by God against all the evils that result from brooding over and becoming absorbed in the sufferings of self. In all the combinations of human circumstance, true love is well nigh the only combatant strong enough to overthrow that last and subtlest enemy of man."

He goes to Huntingdon, and boards in the family of Mr. Unwin, after whose death, he still remains for many years the close friend, and inmate of the widow's house, Mary Unwin, whose patient devotion and unselfish kindness will live as long as Cowper's fame. It is a life of monastic seclusion; hymns and prayers and sermons, with an occasional evening walk, occupy their days and nights, the Rev. John Newton being their neighbor and friend. Cowper renounces all his former friends; the gloom thickens, and the storm bursts suddenly again, while he was one day at the vicarage; although so near his home, with their gardens adjoining, he was there eighteen months before he could be moved to Mrs. Unwin's. He recovers like a child after long illness; builds chairs and bird-cages, and tames his hares. He tries a little drawing and returns, at last, to books. It was then that Mrs. Unwin suggested that he write a poem.

Accepting this thought eagerly, he writes and published *The Progress of Error*, but as his old friends take no notice of it, he quivers with wrath and indignation. Lady Austen tells him the story of John Gilpin's Ride, at which he laughs all night, and

writes his famous verses, so irresistibly comic. When he begs her for another subject, she suggests *The Sofa*, with a smile, and straightway he composes *The Task*, hardly dreaming that he would accomplish a revolution in a day. Says a writer,

“England had fancied herself to have outlived the lofty melody of blank verse. She discovered now that the old strain was her favorite—that it could charm her ear, as well as rouse her soul. She found out that nature was as sweet as it had been in the days of Milton—the English fields as fair, the rural sights and sounds as fresh and tender. This worn and sick man, growing old, fanatic, half madman, half recluse, drew the veil from her eyes, and threw open to her a new, sweet, dewy, fragrant world. It is difficult for us to imagine the surprised delight with which the nation felt the sweetness of this voice, which was so familiar, so homelike, so unpretending. Poetry had been for a century a thing of the coffee-houses and the wits. Cowper sprang at a bound into a place more deeply set in the popular heart than Pope ever attained.”

His work well nigh done, the shadows crept up from the autumnal fields. In the last glimmerings of evening light, when Mary Unwin had already felt the warning touch of paralysis, he writes his most perfect productions—strange anomaly of genius. These were the *Verses to My Mother's Picture* and *To Mary*.

In 1794, Mary Unwin falls into dotage, and Cowper in turn, becomes the nurse. What a solemn picture! One imbecile babbling and laughing in her weakness; the other sitting still and silent as death, speaking to no one, asking nothing, dwelling in a visionary world of diseased fancy! She dies, but in his gathering stupor he knows it not. They take him to a quiet parsonage in Norfolk, where he sits with wild, sad eyes, listening to the moan of the sea. Three years of darkness he survives, writing the *Castaway*, the last and saddest of his poems, in the last year of his life. In the closing year of the century he dies in despair, but, we may trust, to wake in hope.

The lover of his literature is irresistibly attracted by the group of the Lake Poets, as they are called, by their friends, whose history is forever associated with peaceful Westmoreland, Wordsworth and Southey, Coleridge, Lloyd and Lamb—dear Charles Lamb.

If one pronounces that the mark of brain disease was upon all of them, the reader is startled and declares that enthusiasm is

carrying judgment beyond its bounds. But what are the facts? Three of these married three sisters, and all were engaged in a scheme to found a new Society on the Susquehanna, which should show mankind how to live. In later days, Lloyd became a raving maniac, and escaping from control in England, is arrested in France, and dies in a Parisian Asylum. Coleridge, with perhaps the grandest metaphysical intellect ever bestowed upon man, and the author of a fragment which no man that ever lived could finish, the wonderful *Ancient Mariner*, after showing signs of the evil to come, finally accelerated his ruin and went to utter wreck with opium. De Quiney, who has written for us the horrors of opium eating, says:

“It was a fine saying of Addison that Babylon in ruins is not so affecting a spectacle, or so solemn, as a human mind overthrown by lunacy. How much more awful then, and more magnificent a wreck when a mind so regal as that of Coleridge is overthrown, not so much by a visitation of Providence as by the treachery of his own will, and the conspiracy as it were, of himself against himself.”

Southey, the poet and historian, died of lingering cerebral disease. Wordsworth, the cool, calm, reflective poet, the last man to have such a thought associated with him, we are told by his sister in mysterious language, was overwhelmed by a nervous attack, at the sights of the French Revolution in Paris, whither he had gone, and his later days were passed in mental oblivion, for he died of softening of the brain.

Charles Lamb, the remaining one of the friends—who does not love the picture of his shambling, ungainly form, but the kindly eye and the generous hand, and the courteous gentleman, and the most delightful essayist that ever handled pen? His was a consecrated life, ever shadowed by the disease that wrought such havoc in his family. Born of a paralytic mother, he was himself, confined in 1796, in an Asylum at Hoxton. Mary Lamb, his devoted sister, killed her own mother by stabbing, in a sudden access of insanity, and from that moment Charles devoted himself to her life-long care. Renouncing his love and all thought of marriage, he determined to live for her. Whenever the seasons of insanity approached they took their solitary way to the Asylum—she packing her clothes, with the garments of restraint and all. Joyfully receiving the signal of her improvement, he

was wont to go back to lead her home again—beautiful lesson of devotion and brotherly love!

George Gordon Byron was the son of a wild roue, known as Mad Jack Byron, who lived a life of libertinism. His great-uncle, Wm. Lord Byron, killed his relative, Mr. Chaworth, with the sword in a fit of passion. Byron's mother was a high-tempered Highland woman, driven half mad by a spendthrift husband. Once an heiress, but ruined in purse and temper and nerves, by turns she fondled and scolded her solitary, weak, club-footed, and epileptic boy. At eleven he becomes Lord Byron, and from the deepest poverty they pass to the elegance of Newstead Abbey. For fear of the termagant mother, his guardian stands aloof, and the unhappy boy enters life without discipline, with no one to respect, and no one that he loves. A trifling book of juvenile poems is harshly criticized, and he springs to the arena, the Minerva of his genius full born, with a quiver of poisoned arrows. The whole earth shook with the onset, and fame was made. He has no friends; he takes his seat in the House of Lords a stranger. With disappointment in his soul he flies to the East. When he returns, *Childe Harold* has made him the lion of London, and he finds himself, says Moore, "among its illustrious crowds, the most distinguished object."

In the meantime, he lost his mother. She, poor thing, although she could not agree with him, really loved him, and believed in his genius. And he—the moment the funeral procession leaves the door, when all but they two of that household had gone to the grave for the last solemn rites over the ashes of his mother—goes to work with his boxing-gloves and has a violent sparring-match with his servant. It was a wild, physical outburst of dumb misery and defiance—that defiance of pain and of better emotions that distinguished his whole life.

We need not recount the miserable story of his marriage and separation, nor the recital of his dark vices; nor have we time to comment upon the kindly acts his better soul would command, as related by Countess Guiccioli. His long line of brilliant poems the world knows by heart. Unhappily the memoirs were destroyed, which would have revealed to the world more fully the nature of the vulture that preyed upon his life. From time to time recurrent attacks of his epilepsy appeared—the last happen-

ing in the Spring of 1822, when in Greece, upon his expedition to aid the patriots in recovering their freedom. Riding out in bad weather, before he recovered from the prolonged prostration of his last dreadful seizure, he succumbed and died after a brief illness. The epitaph has been pronounced upon him: "Never was life less happy nor more forlorn, nor an end more pitiful. Thus all was ended upon earth of a man who had received every gift which Heaven could bestow, except the control of the glorious faculties that God had placed in his hands."

What a contrast is he to Walter Scott, who, when he is involved deeply in debt by his kindness to others, rallies his brain to labor, and in less than three years alone by the work of his pen, pays a hundred and forty thousand dollars of the sum. He cries out, "Oh, invention, rouse thyself—may man be kind, may God be propitious." "The worst is," he sadly adds, "I never quite know when I am right or wrong." He bears up under two strokes of paralysis. Still, like galley-slave, he labors—confusion of thoughts by day, unalterable weariness and pain by night. When friends tell him his last book (*Count Robert*) is a failure, he only says, pitifully: "God knows I am at sea and in the dark, and the vessel leaking too, I think. I have suffered terribly, and I often wish I could lie down and sleep without waking. But I will fight it out if I can. Did I know how to begin, I would begin again this very day, though I knew I should sink at the end." He struggled until the light went out. His wife died by his side when he most needed help. With one faithful child by him, he toiled on. He makes a journey of despair to Italy and returns to meet his doom. The greatest works of his genius, it well has been pronounced, pale before the work of his life. Scotland holds him the type of her race, the flower of her genius, the noblest, truest and most gifted of all the Scots who glory in the name.

The poet, Shelly, some compassionate hand has described as "a wild and wayward figure, like the Faun of the imagination, or those strange and beautiful beings dwelling between earth and heaven, on the heights of Gothic fancy." He was a spirit of the intermediary world—a wandering genii—nothing more. Before twenty years of his young life had gone by, he had cut himself off from his family and ruined his career. He was a spirit of

the race of Ariel. At Eton, aged fifteen, his one idea is resistance to God, to man, to laws, to authority, to whatever opposed him. This, indeed, is the central idea of his great poem, *Prometheus*. He leaves his classes to study electricity under a Dr. Lind, when he and his preceptor indulge in bouts of blasphemy, striving each to curse the heavier, the one his father, the other the King; often at midnight he sallies forth in hope to call up the evil spirit.

At Oxford, see him a slim lad with unnaturally brilliant eyes, stooping shoulders, and strange voice, like a peacock's cry; he lives amid his crucibles, feeds upon bread almost entirely, which he tears from the loaf as he walks, lingers for hours to throw stones in ponds, or sailing paper boats. That was his passion all his life, and he has been known to use a fifty pound note, when no other paper was near. Engaged in zealous debate, he would suddenly stop, fall like a cat on the rug, and sleep for hours with his little round head exposed to the fiercest heat. He imagines, and tells everybody, when he was expelled, that it was for publishing a book of infidelity, a pure delusion, for he had only read it. The sentence really was for his scurrilous letters to eminent men who were strangers to him. His sisters sent him money by Harriet Westbrook, their schoolfellow. She hates the tyranny of school, and he marries her in his sympathy—one sixteen, the other not nineteen—to go roaming through England, Scotland and Wales. Finally they drift to Ireland—and for what? To issue pamphlets and speak for Catholic Emancipation. Returning to Wales, he imagines some one has fired at him, and put a hole through his gown. He utters a breathless cry to his friends for breathing time and twenty pounds. They pay it and smile, but he declares all the after fluctuations of his health were due to that shock. In this year, 1813, *Queen Mab* was written. This, the most celebrated of his works, is to investigate what he called the horrors of Religion, the falsehood of Revelation and the cruel fiction of Christianity.

Next year he falls in love with Mary Godwin, and reveals it in a strange scene within St. Pancras' churchyard, by the grave of her own mother. He told her if supported by her love, he would enroll his name among the wise and good. He abandons his wife at the cottage in Brockwell, his child, the baby Ianthe, and

his unborn babe, to fly to the continent with Mary, never to see wife and children again. Yet he speaks in quiet friendliness of this abandoned wife, this desolate mother not yet twenty, and proposes to a lawyer that Harriet be invited to join his new household in the capacity of humble friend to himself and Mary, and can hardly be brought to see the impossibility of such a proposal. Despite his sweet amiability, the betrayed wife bore her sorrows two years and then drowned herself.

Now he marries Mary, and going to Switzerland, where they meet Byron, a dark episode in their lives ensues, upon which the pen refuses to touch—let it be buried in night! He rages against English law, because, now that he is rich, the custody of the children is denied to him who murdered their mother—children whose home he has passed many a time, and never once turned to look upon—the unnatural father. Driven by a delusion that the child of Mary will be taken from them by the law, he hastens to Italy. There that hateful poem is given to the world, *Beatrice Cenci*. Strange anomaly, that the brain which conceived that hideous dream, should have produced the *Sky-lark*! He wanders from Pisa to Rome, from Venice to Naples, making romances to himself of lovelorn ladies following him afar off. His thirtieth year was not completed when his frail pleasure yacht went down in the Bay of Spezzia, and his washed up corpse was burned by his friends with a theatrical show of incineration. Poor wandering voice, absolutely dead to the distinctions of right and wrong, to true love for kindred, or reverence for God! Yet his admirers, the Swinburnes and Rossettis of to-day, call him “the greatest English poet since Milton, and the greatest Englishman of his time.” Who can doubt that, but for accident, the torch of life would have burned out with the glare of madness?

I feel that this sad catalogue should come to a close, and will but briefly say that among the great number whose names belong here, are the melancholy poets, Pollok and Young; Harrington, the author of the famous *Oceana*, whose madness was extreme; Simon Browne, the celebrated divine, whose delusion was that his soul was annihilated; Robert Boyle, the philosopher, who could barely refrain from suicide; Metastasio, the father of Italian opera; and Robert Hall, of whom Prof. Sedgwick

declares, "For moral grandeur, for Christian truth and sublimity, we may doubt whether his sermons have their match in the sacred oratory of any age or century." Observe that Robert Hall read *Butler's Analogy* and Edwards on the *Will* at nine years of age; wrote religious essays at ten; became a Baptist minister at sixteen; and, laboring at mental work twelve hours a day, soon was conveyed to the ward of an asylum. Upon recovery and rash excess in work again, he was sent once more to its friendly walls. The great critic Dugald Stewart, endorsed by the Reviews, affirms: "Whoever wishes to see the English language in perfection, must read the writings of Robert Hall."

Who that heard it forgets the thrill through Christendom when the world knew that Hugh Miller had taken his own life? By constitution, superstitious and morbidly suspicious, the child of a sea-faring man lost in a storm, his mother filled the boy's mind with weird, Celtic tales, the ferment of superstitious fears. Battling in after days between skepticism and truth, he cuts himself fearful back strokes; all his life a terrific intensity of mental vision characterized him, and the victim of misunderstandings among friends, and the chimeras of his fancy, he died at his table by his own hand, in a dark hour when reason had left her throne.

Paganini, the violinist, whose execution has never been equalled by mortal man, was a being with an intensely susceptible nervous system, often deprived of the powers of speech, with a pale, bony face, frequently of livid green; at times, it was said, he seemed to be out of the body. His contradictions he could not himself explain—dashing from city to city with utmost speed, with all the windows of the carriage closed even in the hottest weather; he entered no inn, nor spoke when he was addressed. Arrived at his hotel, he removed his clothes, and threw open doors and windows for what he called his air bath. He lay on the sofa, passed days without eating, drank his chamomile tea and sat in perfect darkness at night until his hour for sleep. Sixty people have been waiting to see him, but he took no notice of knocks, and sat, lost in trance. No wonder the mob believed him a murderer whom the evil spirit had taught to play upon one string with such wonderful music, when a convict in the condemned cell. After astonishing a world, he gave his

dying moments to the feeble notes of his violin in the moonlight, by the blue Mediterranean, with the breeze waving softly in the trees, as he expired broken hearted—his spell was over. Dying without the sacraments, his body was refused Christian burial, and it lay above ground five years, until the vulgar stories of ghostly violins playing about the coffin, impelled the son to pay large sums of money to obtain the privilege at last to bury his father in the village near his home, where his ashes were finally laid to rest in May, 1845.

We will turn aside to read some passages from the career of Junius Brutus Booth, the most eminent actor that America ever produced. From his memoirs, as penned by his own daughter, we learn that he had undoubted periods of madness. To use her language :

“The calamity seemed to increase in strength and frequency with maturer years, and sometimes assumed very singular phases. From childhood, we learned from our mother, the devoted and unwearied nurse of him who endured these periodical tortures of mind, to regard these seasons of abstraction with sad and reverent forbearance.”

So completely did he merge his own identity into that of the character he assumed, that most of his fellow actors dreaded to face him as Richmond on the stage, in the last struggle of Richard, lest he should really take their lives ; for frequently he had to be reminded that he was personating a character, and must allow himself to be slain.

His salvation from utter wreck, for many years, was his love of the soil, the happy retirement to the work of his garden in the open air, away from the feverish excitement of the theatre.

On one occasion, while on a voyage South, he spoke of the actor, Conway, who had committed suicide by leaping into the sea. As the vessel neared the spot, Booth cried out that he had a message for Conway, and jumped into the ocean ; but a boat was lowered at once, and he was saved. Yet the suicidal impulse was so quickly over, that he called out, when once safe in the boat, “I say Tom, you are a heavy man—be steady. If the boat upsets, we are all drowned.”

It is well known, that in Charleston, after he had played Iago one night, and returned to their room, with his friend Flynn,

who had been the Othello of the evening, that he attacked him fiercely with his drawn sword, crying:

"Nothing can or shall satisfy my soul,
Till I am even with him—life for life."

Flynn, to save his life, grappled the fire-poker, and struck Booth in the face, breaking his nose. On another occasion, he came near sacrificing the life of the actor, Eaton, in the same play.

He was supposed by turns a Jew, for he knew Hebrew, revered the Talmud, and attended the Synagogue, joining the worship in the Hebraic tongue. He was familiar with the Koran; and again he was a devout Catholic. It is related, that while a Catholic, he once walked from his house, in Harford county, Maryland, to Washington, with leaden inner soles to his shoes, by way of penance for some sin.

Few of his eccentricities were more remarkable, than his desire to leave the stage at \$300 a night when thousands hung upon his lips, and money and fame were his everywhere, for the post of light-house keeper at Cape Hatteras, for \$300 a year. We learn that this memorandum exists, in his handwriting:

"Spoke to Mr. Blount, Collector of Customs, about Cape Hatteras light-house. He offered it to me, with the dwelling house and twenty acres of land, and salary of \$300 per annum, for keeping the light—government providing the oil and cotton; a quart per diem. Grapes, melons, cabbages, carrots and onions grow there; rainwater the only drink, a cistern on the premises for that purpose. Abundance of fish and wild fowl; pigs, cows and horses find good pasture. Soil too light for wheat or corn. The office is for life, and only taken away through misbehavior. Light requires trimming every night at 12 o'clock; no taxes, firewood from the wrecks. Strawberries, currants and apple trees should be taken there; also a plow, spades, and a chest of carpenter's tools. Pine tables the best. Mr. Blount is to write me word if the office can be given me, in April next, from his seat in Washington, N. C."

It is needless to say that theatrical managers broke up the plan at headquarters.

Booth permitted no animals to be killed on his place, ate no animal food, nor allowed it in his house, for many years. It is said when a grave and respectable Quaker once pressed dish after dish of meats upon him at supper, on a steamboat, and

finally offered something for which Booth had a special abhorrence, he fixed his deep eyes on the Quaker, and said with profound earnestness, "Friend! I only indulge in one kind of flesh—human flesh!—that I take raw!"

Once, in Boston, after a long scriptural argument against the use of animal food, and the reading of the *Ancient Mariner* to the Rev. Mr. Clarke, he exhibited a bushel of wild pigeons on a sheet, which he asked to have buried in the cemetery to testify in a public way against man's barbarity. Upon refusal, a day or two after, he actually placed them in a coffin and conveyed them to a lot he had purchased in another cemetery, with all the solemnities of a funeral. Yet, he was acting every night in his usual marvelous style. Finally, the actors everywhere grew afraid of him. Terribly in earnest on the stage, when he passed off he sat behind the scenes, looking sternly at the ground and speaking to no one.

He would often disappear when in no manner intoxicated, but his family avoided questioning, and respected the sanctity of his struggles and his seasons of darkness. With him certain colors and metals were sacred for certain days. Strange as it seems to some, this world-renowned actor was a good man, humble and devout before his Maker, and his last words were Pray! Pray! Pray!

All these illustrious victims of disease, save the last, are those of children of the old world. There are reasons why it may not become me to dwell upon the infirmities of our own countrymen from James Otis, the revolutionary patriot, to Horace Greeley, the late candidate for the highest position in the gift of the American people.

Reviewing this mighty mass of human misery, we see everywhere a degenerate ancestry, or gross physical habits, or overwhelming labors thrown upon a young and tender brain. Some fall at the first onset; others bravely resist, and manage to secure all that life can give. Yet again and again we have seen the immortal mind rising above the trammels of the body to assert its kinship with Divinity.

The lesson is one of the greatest of the hour to us as a people. The late war has not left us all its legacies—the next generation, will bear its cruel stamp. Excess in all its forms, is a national

sin; in eating, and drinking, in gambling and extravagance, in the rush of social emulation, and the mad excitements of wealth and ambition. Men are dropping around us every day, with paralysis and apoplexy. Hundreds are yearly added to the rolls of the insane, whose families are ruined, their wives broken-hearted, their children thrown as waifs on the tossing sea of destiny.

Let us take comfort that science can do so much to heal the wounds of the brain, and break down the barriers between the mind and body. The venerable Dr. Chipley utters these words of consolation and of hope:

"There is in fact a power in man to prevent or control insanity, and it fails chiefly when it has been misdirected in the earlier periods of life. This power is rarely efficient unless it has been developed and strengthened by education; and hence the poor and unschooled are the greatest sufferers from the most terrible of all human afflictions. For example, the educated and the uninstructed are alike the subjects of illusions; but the trained mind of one will recognize their true character, and adopt suitable measures to correct the morbid condition on which they depend; while the other, unable to reason, will accept them as real. The illusions may be precisely the same, yet the one subject is sane, and the other insane. The difference is in the organ of self-control. Vagaries intrude themselves upon all minds, but the man of self-control represses them, and seeks fresh impressions from without—the weak man yields to them, and is lost."

Let our children be brought up in sound and healthful habits of mind and body. Let us rein in the passions that would enslave us. Let us not flee the wretched lunatic as one accursed of God, the object of curiosity or of horror; but rather enfold him in the arms of a charity and a sweet compassion, whose great Exemplar did not disdain to "heal the sick."

ART. III.—*Some of the Disturbances of Nutrition Consecutive to Diseases and Injuries of the Nervous System.* By WILLIAM C. DABNEY, M. D., Charlottesville, Va.*

I propose to call attention to certain nutritive disturbances

*This paper was prepared for the session of the Medical Society of Virginia held in Charlottesville, October 17th, but by request of the Editor, it has been given to the *Monthly* by vote of the Society.—EDITOR.

frequently seen after lesions of various parts of the nervous system. I can claim, however, but little originality for the views which I shall present; but I have endeavored to collect from various sources facts relating to the subject in hand which would prove interesting and instructive.

It is chiefly to the French physicians, especially MM. Charcot, Mougeot and Conyba, that we are indebted for our knowledge of the nutritive disturbances already alluded to, although Paget and other English pathologists have reported some cases very accurately. Our own countryman, Dr. S. Weir Mitchell, has written a most admirable work on the injuries of nerves; and another gentleman in New York, Dr. L. D. Bulkley, the eminent dermatologist, has written several admirable papers on the relation of nerve lesions to diseases of the skin.

The existence of special nerves whose function it is to preside over nutrition is even now denied by many physiologists. Dr. Austin Flint, Jr., states that the nutritive disturbances which occur in muscles after nerve lesions, are merely due to the consequent disuse; and even M. Charcot states that in conditions of health the nervous system exercises no influence whatever on nutrition. It is foreign to our present purpose to consider this subject at any length; but we will briefly state the grounds on which it is held that there are nerves whose function it is to preside over secretion at least. And just here let me say that Hermann, in his admirable work on the *Physiology of Man*, makes a distinction between secretory nerve fibres and trophic nerve fibres which is not generally made by physiologists. By the former, he means those whose terminal organ is a glandular element, and whose specific function consists in increasing the amount of secretion in a gland directly (without vaso-motor influence) when subjected to direct or reflex irritation.

He characterizes trophic fibres as those which preside over the nutritive changes (process of oxidation) which occur in the parenchyma and juices of the tissues, just as the secretory do over the free secretions. Physiologists generally, however, class the secretory nerves with the trophic, and the well known influence of the corda tympani on the secretion from the sub-maxillary gland is taken as a typical illustration of the action of a trophic

nerve. Ludwig has shown that if the *corda tympani* is irritated there is an increased secretion from this gland; and he was led to the conclusion also that this was not due to vaso-motor influence alone, but to an increased activity of the secreting elements themselves. His reasons for this opinion are that the secretion continues even when the pressure in the gland is greater than that in the blood vessels; and further, that secretion would continue even after the animal was decapitated. Heidenhain has shown further that the injection of atropia into the veins of an animal will deprive the *corda* of its direct secreting influence, while it has no effect on the vaso-inhibiting function. Hermann thinks the strongest evidence of the existence of trophic nerves is in the changes which the nerves themselves undergo when separated from their centres. Thus, it has been shown that if the posterior roots be divided in front of the ganglion, they undergo degeneration; while, if divided behind it, no change occurs.

Another objection which has been raised to the existence of trophic nerves, is, that they cannot be separated from the nerves of sensation and motion. The answer to this objection is not difficult. There is no way of telling the difference between a sensitive and motor nerve (except that there is a slight difference between the size of the two); but further than this, investigations of a comparatively recent date have rendered it certain that both motor and sensitive nerves will conduct both ways, and that their difference in function is solely due to the differences in their terminal relations. Now it has repeatedly been shown that nerves terminate in certain gland cells, and it has long been a well-established fact that while each muscular fibre was possessed of one or more terminal plates, there were many nerves distributed to muscles which do not terminate in this way, and that while some of the nerves of the skin terminate in tactile corpuscles, it is but a very small proportion which can be accounted for in this way. The same holds good also with respect to the nerve terminations in other tissues.

Turning, now, from this part of our subject, which has been of purely physiological interest, we shall consider:

1. The tissues which undergo nutritive changes, and the nature of these changes.

2. The locality and character of the nerve lesion causing them.

3. The prognosis.

4. The treatment of such lesions.

M. Charcot states in his admirable *Lectures on Diseases of the Nervous System* that, in consequence of nerve lesions, we may have affections of the skin, the connective tissue, the muscles, the joints, the bones, and even the viscera.

With respect to skin diseases, many have, from time to time, by different writers, been thought to be connected with nervous affections; and Charcot and Dr. Bulkley appear to entertain the same view; but two of them, so far as yet known, are invariably connected with the nervous system; these are herpes and elephantiasis græcorum, or anæsthetic lepra.

With respect to herpes, the view which has been almost universally held until recently was, that it was caused by inflammation of the ganglia of the posterior roots of the spinal nerves, and this is doubtless frequently the case; but cases have recently been reported by Bulkley, Duret and others, in which there was a perineuritis without the ganglion being in the least affected. The fact, however, that it may be caused by inflammation of these ganglia alone shows that it is *not* due to vaso-motor influence, since M. Claude Bernard has shown that the vaso-motor nerves pass out of the spine through the anterior roots.

Another trophic trouble, which should, perhaps, properly be mentioned in this connection, is the well-known slough which so frequently occurs on the sacrum and buttocks after injuries of the brain and spinal cord.

No definite conclusions have been reached as to the part of the nerve centres affected when these sloughs form. M. Joffroy a few months since reported some cases to the Society of Biology which, he thought, warranted the conclusion that injuries of the posterior lobes gave rise to these troubles; but further investigations, chiefly by Maynard, have shown this to be a mistake. In one well authenticated case, the brain lesion was limited to the corpus striatum, and in another case, in which sloughs occurred at various portions of the body after typhoid fever, the cerebral affection was confined entirely to the cortical portion. A

peculiarity about these sloughs, however, is that they generally make their appearance at a very early stage, and M. Charcot lays great stress upon this point. Another fact observed by the same distinguished pathologist is that the sloughs due to cerebral and those due to spinal lesions occupy different sites. Those due to the former occupy a site lower down and further from the median line on the buttock proper, while those due to spinal lesion are observed on the sacrum, and much nearer the median line.

The prognosis in herpes and the skin eruptions is usually good. Dr. Bulkley states that the constant current is of the greatest benefit, and he further recommends phosphide of zinc and nuxvomica. Arsenic has also been employed with success, and is highly recommended by Hardy in a recent lecture at the Saint Louis Hospital, Paris. The sloughs which we have just mentioned are of grave import, and but little can be done in such cases. Time will not permit me to devote more space to skin affections, though I have been forced to glance at them very briefly, and have entirely left out some of the most interesting varieties.

I shall call attention to but two more of the various classes of changes which we have previously mentioned, viz.: those occurring in connective tissue and in muscular tissue.

Dr. Mitchell states that the changes which occur in connective tissue after nerve lesions generally consists in œdema, &c. He says, further, that he has only once seen an increase of this tissue. We shall have occasion to refer to this again in connection with muscular tissue. In the meantime, however, we may state that there can be no doubt that the sclerosis of the brain and spinal cord, which has figured so largely in nerve pathology of late years, is due to an increased development of the connective tissue—neuroglia of the nerve centres. M. Charcot contends, and apparently with good ground, that this sclerosis is secondary to a disease of the nerve cell, and adduces as proof the fact that the sclerosis is greatest in the immediate neighborhood of these cells. Dr. Hammond thinks the sclerosis due to a chronic inflammation.

The prognosis is generally exceedingly grave in all sclerosis of the nerve centres. Dr. Hammond recommends ergot in the early stages, and concurs with most other writers in advising the

galvanic current at a later stage. In cases of syphilitic origin, iodide of potassium has proved very serviceable.

Finally, with respect to muscular tissue: The nature of the changes which occur in muscles in consequence of disturbances of trophic nerves, has been a subject of discussion for a long time, and it is unquestionably to M. Charcot that we owe most in the solution of this difficult problem. The matter in dispute has related to the cause as well as the nature of the changes which the muscles undergo—one school contending that there were no trophic lesions of muscles, and that all changes in muscular tissue were due to disuse; while another contended that the changes from disuse and the trophic changes proper were due to different causes, and were also different in their pathology.

M. Charcot is an adherent of this latter school, and his views are so good and reasons so strong that I propose to summarize them here. He compares the changes which occur after section of a nerve (disuse of muscle) and irritation of a nerve (trophic disturbances) in the following way:

Atrophy from disuse causes loss of electro-muscular contractility very slowly, and it is only complete after many months. Atrophy from trophic trouble commences in a day or two, and the electro-muscular contractility is completely lost in 14 or 15 days.

In atrophy from disuse, faradic and galvanic irritability diminish simultaneously. In atrophy from disease of the trophic nerves, faradic irritability is often lost when the galvanic remains, and may be even increased. M. C. also states that in atrophy caused by disuse, the muscle undergoes fatty degeneration, while in atrophy from disease of trophic nerves it undergoes a *cirrhotic* change.

The nerve lesions causing this muscular atrophy may be situated either in the trunks of nerves, as from pressure, or it may be caused by disuse of these large cells in the anterior horns. Quite a number of cases have recently been reported of atrophy caused by pressure on the nerve, which were promptly relieved by galvanization. In a discussion before the Société de Chirurgie, on the 22d of March last, MM. Le Fort and Verneuil spoke very favorably of the action of the faradic and galvanic currents,

used alternately in these cases. In cases of "progressive muscular atrophy" and the so-called "infantile paralysis," which are manifestly due to a degeneration of the large cells in the anterior horn of gray matter, the prognosis is most unfavorable; nor does treatment of any kind make the outlook much more hopeful. The indications of treatment would indirectly be to endeavor to stimulate the trophic nerves presiding over the nutrition of the cord itself. For this purpose, the passage of electric currents through the spinal cord—central galvanization is perhaps the best.

I have endeavored to call your attention, gentlemen, to a class of affections which are, unquestionably, of very great importance, and which are now receiving, or beginning to receive, both abroad and in our own country, a large share of attention. Investigations on all points, however difficult, have, in the end, tended to throw light on these subjects, and enabled us to treat them more successfully; and I am convinced that, should any one be led by the remarks which I have made to look into this intricate but deeply interesting subject, he will be more than repaid for his trouble by the pleasure which it will give him, and he will learn what may be of the greatest service to himself and others.

ART. IV.—*Addison's Disease.* By JOHN C. PETERS, M. D., President of the Medical Society of the County of New York; and of the New York Neurological Society; Vice President of the Public Health Association of New York, etc.

Dr. Addison first drew attention to a series of symptoms which he believed were generally associated with disease of the suprarenal capsules. One of the most prominent is a peculiar cachexia which sets in gradually without any obvious cause, characterized by increasing debility and langor in every bodily and mental effort, at last amounting to extreme prostration and marked anæmia, with feebleness of the heart's action, and a tendency to faintness, which may increase to prolonged attacks of syncope when the heart becomes atrophied. The other most marked feature is a discoloration of the skin from the presence of pigment granules and cells, which may be dingy or smoky, or

brown, yellowish, or greyish black, and in well marked cases assumes the so-called bronzed appearance. It may be distinguished from liver disease by the pearly whiteness of the sclerotics, and the darker color of the stools. The stomach and bowels are apt to become involved, with pain in the epigastrium, which may be severe, and vomiting, which is sometimes urgent. Obstinate diarrhoea occasionally sets in. In these cases there is apt to be atrophy of the gastro-intestinal mucous membrane, with degeneration of the peptic and other glands.

Addison's disease is different from every other disease of the supra-renal bodies, but is most nearly allied to scrofula and tubercle. The organs are always enlarged, the fibrous envelope thickened and adherent to surrounding parts. The substance hard, nodulated, all distinction between the cortical and medullary portions lost, and the natural structure quite obliterated by two forms of adventitious material. *First*, By a translucent fibroid material, sometimes quite resembling cartilage, of a greyish or slightly greenish color, which becomes pink on exposure to the air. *Secondly*, By a white or yellowish, opaque, crumbling material, distantly resembling caseous or scrofulous matter, or crude tubercle. Besides, there may be collections of creamy, liquid-like, softened tubercle or cretaceous matter; and sometimes all are so mingled together as to produce a mottled appearance. The general naked eye appearance are said by Jones & Sieveking to resemble syphilitic gummata of the brain more than any other product. The grey fibroid material consists of connective tissue, with a granular, fibrillated matting, nuclei, and some spindle-cells; but occasionally it is nearly amorphous. This appearance has suggested the term lardaceous to some, but it is quite distinct from it, and is unstained by iodine. The opaque material is evidently in a state of necrosis or decay, consisting of shrunk and withered cells, like the so-called tubercle-corpuscles, amorphous granular matter and fat molecules, without any connecting stroma. The creamy fluid is not true pus, but debris of tissue, granular matter and fat, like softened caseous material.

Although miliary tubercle is rarely found in the organs themselves, something like it frequently occurs simultaneously in other organs, doubtless from absorption, and it is not to be de-

nied that the appearanees closely resemble those seen in old tuberculous disease, in which fibrous and caseous metamorphosis go hand in hand. In 56 per cent. of Greenhow's cases, there was tubercle or absorption material in other organs, viz.: in 72 cases out of 128. In 46 there was no such complication, and in 10 more there was other serious disease not tubercular. In Klebs 159 cases, 86 were combined with tubercle or other absorption material; 55 were decidedly non-tubercular; and in 18 the tubercular complication was doubtful. In the 74 non-tubercular cases, 11 only were without pigmentation of the skin, while 30 out of the 86 tuberculous cases had it; which seems to show that the non-tubercular disease has a more decided influence in causing bronzing of the skin.

The supra-renal capsules undergo normal fatty degeneration and pigmentation, and the latter has been supposed to be connected with the excessive coloration of the skin which attends Addison's disease; but if there is any such relation, it must proceed from very rapid absorption, as when the skin is bronzed there is usually absence of pigment in the capsules.

Injury, hæmorrhage, lardaceous degeneration, cancer, tumors, and even tolerably advanced tubercular disease do not produce the same results as the ehronic diffuse degenerative change described as Addison's disease. The atrophy of the heart and leukæmic condition of the blood will account for some of the excessive debility, but some great authorities look to the frequent implication of the nervous connections of the supra-renal bodies, especially of the solar plexus and abdominal sympathetic to account for the debility and pigmentation. The capsules are highly nervous organs; their medullary part is full of sympathetic nerves with ganglia, and their connections with the solar plexus are numerous and large, so that their destruction may paralyze the vaso-motor nerves of the abdomen, leading to congestion of the abdominal viscera, absorption of the pigment of the blood, anæmia of the brain, and insufficient supply to the heart and stomach, thus inducing the bronzing, lassitude, and feeble pulse and digestion. Fifteen cases of implication of the abdominal nerves have been observed.

The disease is possibly laid in some congenital disorder. During the earlier portion of intra-uterine life, these bodies at first

exceed the kidneys in magnitude. At the 12th week in the human subject they are about as large as the latter, and from that time on, they remain more or less stationary.

The disease requires the best food, with large quantities of pepsin, and the most powerful tonics, of which arsenic and phosphorus are the best, aided by quinine, muriated tincture of iron and strychnia.

Clinical Reports.

Diabetes Insipidus Successfully Treated with Jaborandi. By
WALTER A. NEWMAN, M. D., Liberty Mills, Va.

This report cannot be as complete as I desire, from my having lost sight of the case for several months, during which time it lost ground.

A child, æt. 8 years, came to me about the latter part of last March. He had been troubled for three years with excessive diuresis and almost constant thirst. With these prominent symptoms, there were also depressed spirits, poor appetite, dry, scaly skin, tendency to constipation, general emaciation, debility, and some fever. Urine, three gallons excreted in 24 hours—two gallons during night—of a light straw color; specific gravity, 1003 to 1004; tests for albumen and sugar, negative. My father diagnosed diabetes insipidus. All the usual remedies in such cases—iron, acids, opium, dieting, &c.—had been tried with no benefit, and the case was becoming progressively worse. Your reply to a letter from me confirmed the diagnosis and recommended the trial of *jaborandi*—referring me to the proceedings of the Richmond Academy of Medicine in the April No. of the *Monthly* for a report of similar cases under that treatment by Dr. Fairfax.

I commenced, April 10th, with the fluid extract of *jaborandi*, 15 drops morning and night, enjoining plenty of exercise, and diversion of the patient's mind from himself as much as possible. No restrictions as to diet. In a few days, moisture of the skin gave evidence of the beneficial effects of the medicine. April 20th. Skin smooth and moist; perspiration easily excited by exercise; appetite improved; less thirst; and urine considerably diminished in quantity. May 1. Improvement continues; passed one quart of urine through the night. I heard very little more of the patient till about August 1st, when I learned that, from a

neglect on the part of the parent to give the medicine for two or three weeks, there was a rapid decline in his good condition, I directed the continuance of the jaborandi as before, and 5 to 6 drops mur. tinct. iron after meals, twice a day, from which time there has been gradual, and, I believe, permanent improvement. He has good appetite, good digestion, and is increasing in flesh.

Correspondence.

Treatment of Tape-Worm.

Dear Sir,—In the September number of your journal I noticed a prescription of Dr. F. A. Ross, of Mobile, for tape-worm, reported in the Proceedings of the Mobile Medical Society. No doubt this combination, if properly administered, will kill the majority of tape-worms. Having treated twenty cases in my brief professional experience, five of which were in the last year, and two within the past month, and in every instance bringing away the worm, or a large portion of it, my mode of treatment may be of value to some of your readers.

No doctor can certainly diagnose *tænia solium*, unless he can find segments of the worm in the dejections. The diagnosis in each of the above cases was fully established before treatment was commenced. After making my patient fast from twenty-four to forty-eight hours—and when I say fast I do not mean total abstinence from food, but *light diet*, partaking of beef tea, wine and such articles as are absorbed in the stomach, and consequently do not reach the worm in the small intestines—I administered from ʒss to ʒj of the oil of male fern in ʒij of thin mucilage; and ten minutes afterwards give a goblet of sweet milk, which is a favorite diet of this parasite, and a fine vehicle for the remedy. Two hours after the above dose, I give ʒj castor oil, combined in mucilage, with ʒj to ʒiv of spts. turpentine, which always does the work, and with remarkable little discomfort to the patient. Now, sir, I cannot say that these twenty patients were certainly cured, as in many cases I could not keep up my acquaintance with them, but I do know that from ten to thirty feet of worm was ejected in every instance, and in nine-tenths the appearance indicated the perfect and entire worm. I have

never been able to identify the head with certainty—owing either to ignorance or want of magnifying glasses. I am sometimes inclined to think they have no head. “Out of one hundred patients, treated for *tænia*, by Bremser, he only once found the head in the dejections; yet all are said to be cured.”*

On day before yesterday Private C., of the Third Cavalry Band, reported at sick call, and stated he had been suffering from *tænia* for fourteen years, and could not get relieved. He reported that, at every operation, segments of the worm were ejected, and that often while walking, they would escape involuntary, and that he was “very miserable.” I told him to fast for forty-eight hours and come back, which order he obeyed (*i. e.*, he was back promptly, and expressed a willingness to *take anything* that would relieve him). I directed the above recipe, and ordered him to remain in the hospital. In less than three hours after the castor oil and turpentine were administered, it acted freely on the bowels, expelling eighteen feet of *tænia solium*, embracing six hundred segments by actual measurement, and presenting every appearance of a perfect worm.† To-day he is the happiest man in the garrison, and blows his cornet with increased vigor.

Neither one nor *twenty* successful cases can establish a remedy as a specific, and I cannot believe the male fern will kill all of the *tænia solium*, but it seems to be their deadliest enemy. After a long fast, probably, any purgative would remove the worm in a majority of cases; but I believe with Drs. Christison, Gull, James and others, that the ethereal oleo-resinous extract of the male fern is the most successful remedy yet known to the profession for tape-worm—the *tænia solium*.

Yours truly, B. G. McPHAIL, M. D., U. S. A.,
Post Surgeon Fort D. A. Russell, Wy. Ty.

November 1st, 1876.

Buffalo Lithia Waters in Menstrual Disorders.

Mr. Editor,—Colonel Goode, proprietor of Buffalo Lithia Springs, has shown me two cases which he informs me are to

*Aitken's Science and Practice of Medicine—1st vol.,²p. 836.

†Sixteen feet of this worm were connected, and I think at least four feet were lost in the excrement.

appear as an advertisement in the next issue of your valuable journal—one a case of suppressed catamenia, reported by Dr. Joseph S. Edie, an old and intelligent practitioner of Southwest Virginia; the other uterine engorgement, reported by Dr. T. P. Jermon, undoubtedly one of the first medical men of the State of North Carolina—both of which cases were relieved by these waters after a failure of other remedies.

With your permission, I will take the occasion to invite the attention of the medical profession to the great value of these waters as a remedial agent in all cases of *deranged menstrual function*. I have been for thirty years an active practitioner of medicine, in a section of country within range of the Buffalo Springs, and was at one time resident physician there, and I have no hesitation in saying that I know of no remedial agent at all comparable to the water of the original Buffalo Spring, now known as No. 1, in the treatment of the peculiar and distressing maladies of women. There are, I am satisfied, but few cases of this character that would not yield to the persistent use of this water alone, and none in which it would not be found a most valuable adjuvant to the physician. I feel fully warranted in saying, with Dr. Jermon, that in such cases this water may be regarded as "*well nigh specific*;" and, indeed, this is the general testimony not only of the medical men, but of the heads of families of the entire surrounding country. Spring No. 2, though of recent discovery, has shown remarkable adaptation and power in the same class of diseases, and it is the opinion of some very intelligent medical men who have prescribed it in the class of diseases referred to, that it is a remedy of equal, and, if possible, greater potency than No. 1. There are in the immediate neighborhood of these Springs a number of families, who use almost constantly the mineral waters. Dr. James Shelton, the physician of the families referred to, says that it is a noticeably rare occurrence that there is any disturbance of the monthly functions among the females who use these waters. This is certainly a significant fact.

I make this communication, prompted alone by the desire to call the attention of the medical men of the country to a health-giving fountain, which hitherto there has been but little effort to make known, which, I verily believe, possesses virtues unsur-

passed by any upon the American continent, and which I regard as an especial blessing to the suffering women of our country.

Very respectfully,

M. M. JORDAN, M. D.

Boydton, Va., Nov. 1, 1876.

Berenger-Feraud's Treatment of Yellow Disease.

Mr. Editor,—Having kindly given space in your November number for a translation of Berenger-Feraud's last chapter on this subject, perhaps you may find his own summary of his mode of treatment acceptable to your readers. It is as follows:

“We have now arrived at the end of our study of the treatment of melanuric bilious fever, and we have spoken fully of details—I hope sufficiently to enable the practitioner to understand well the general direction which the treatment ought to take. But, since in a question so important as this, we need not fear to revert often, if necessary, to the same subject, in order to show plainly what we wish to have understood, I shall repeat here, in a few words, this treatment of melanuric bilious fever, that I may condense the principal means employed.

A. Incipient Period.—Give quinine in strong and repeated doses to try to check the attack, if there has been timely warning. Watch the patient from the first moment with extreme attention to see if it is necessary to have the quinine preceded by an emetic or purgative, or a preparation of opium—means intended to reduce the gastric or bilious condition, and, consequently to increase the action of quinine, and its chances for success.

B. Febrile Period. Employ quinine in strong and continued doses until the fever is diminished. Do not fear to increase to the highest figures for this febrifuge, $3\frac{1}{2}$ to 4 grammes [from 50 to 60 grains], constantly watching the situation with a prudent eye. Give preparations of opium to increase the power of enduring the quinine and its chances for success. In a word, the management of the physician is here very analogous to what it ought to be in the incipient period.

C. Period of Prostration.—Restore the strength of the patient by nutritive and medicinal agents, remembering that this period depends upon the weakness of the sufferer, so that the means employed to nourish your patient are of considerable importance.

Finally, a recommendation applicable to the three periods is

that, as in melanuric bilious fever the stomach has an excessive susceptibility, and as the gastric passage is too often uncertain, one must then resort to the rectal passage, as much to have the quinine absorbed as to ultimately sustain the strength of the patient.

The theory of this method of treatment is not very complicated, as you see. I will add that, for prudent minds and attentive practitioners, it is not very difficult to apply it in an effective manner; and when they take care not to lose the opportune moment to attack the element of fever or debility, success most usually crowns their efforts, *provided* the constitution of the patient has not been totally ruined by a long residence in the colonies, by previous diseases, and especially by excesses.

The ultimate conclusion as to treatment is, in fine, that when the patient has been cured, the best thing is to send him back to Europe. There only will he recover his health, jeopardized hereafter in hot countries."

Permit me to correct one or two typographical errors in the Translation made last month. There is an unnecessary *the* before *calomel*, and "*of which*" last page for "*whose*," etc. On p. 630, line 21, for "pill" read "*bile*." Could I have seen proof sheets, I would have changed the following words: P. 630, line 9, instead of "prescription," read *medicine*; p. 632, line 24, for "depraved," say *deranged*.

Yours very truly,

Greene Springs, Ala.

J. W. A. WRIGHT.

Stricture and Spermatorrhœa following Gonorrhœa.

Frank G., æt. 23, applied at the Medical College Dispensary April 6th, 1876. About five years ago he contracted gonorrhœa; gleet discharge followed, which lasted several months. For a long time he had observed the stream of urine smaller; for some months past it had not been larger than a small crow's quill, and in damp weather he urinated in drops only. There was a frequent desire to urinate. During micturition he strained violently, and the last portion passed contained white, glutinous matter. There was general weakness, nervous irritability and much mental depression. His digestive organs were frequently disordered; he had flatulence and constipation. Hearing, sight and memory were impaired; and there was an inability to fix the attention; he had attacks of heart palpitation, giddiness and headaches.

Upon examination, the end of the foreskin was much inflamed; the testicles hung very low; the left one was varicosed; the perineum over the prostate gland was tender. For two weeks I made frequent attempts to pass an instrument, but failed. Afterwards, I succeeded in passing Maisonneuve's filiform bougies (olive pointed), from No. 1 to 12, until the strictures were thoroughly dilated. The continued use of bougies has entirely relieved the strictures. Upon examination of the urine by the microscope, I detected spermatozoa. Gave a mixture of phosphoric acid, tincture nux vomica and bark. I did not give steel, as recommended by many works, as it often produces congestion of the sexual organs. Ordered a hip-bath of cold water every morning. Bowels were regulated by simple aperients; acidity of urine was corrected by alkaline and mucilaginous drinks. The prostatic portion of the urethra was cauterized with a saturated solution of nitrate of silver, through a silver catheter having about a dozen minute apertures near the end. Gave sedatives of camphor, conium and belladonna when needed. In addition, cod liver oil was given, and a moderate allowance of wine or ale; milk instead of tea or coffee. The testicles were supported by a suspensory bandage. The medicines were taken regularly for six weeks, after which the nocturnal emissions and the discharge of semen with the urine ceased. He was greatly improved, quite cheerful, and expressed himself as being entirely well.

R. S. JETER, M. D.,

Surgeon in Charge Medical College Dispensary.

Richmond, Nov., 1876.

Original Translations.

Translations from the French. By L. S. JOYNES, M. D., Richmond, Va.

Picric Acid in the Treatment of Sore Nipples.—M. Charrier has added picric (or carbozatic) acid to the long list of remedies for excoriations and fissures of the nipple. This acid, which is a product of the action of nitric acid on indigo, carbolic acid and other substances, has already been employed experimentally, to some extent, as an internal remedy, but very little is known of its therapeutic virtues. As an external application in the affections above mentioned, M. Charrier declares its effects to be remarkable—a number of cases of deep fissures of the nipple, threatening to result in abscess of the breast, hav-

ing been cured by it in from six to twelve days, though the patient continued to nurse without interruption. The form in which he employs it (as given in the *Annales de Gynécologie*, July, 1876,) is as follows: Picric acid, *chemically pure*, 13 grammes; water 1000 grammes. This solution is thoroughly applied to the nipple every morning; and after each act of nursing, the nipple is immersed for three or four minutes in a solution of the acid of the strength of 1 part to 1000. The bitter taste of this acid—"insupportably bitter," say the chemists—might seem to forbid its use for the purpose in question; but M. Charrier declares that it does not cause the infant to refuse the nipple. A better reason, however, why most physicians will hesitate to follow this gentleman's practice is that picric acid is not devoid of poisonous properties.

Passage of Poisonous Substances into the Milk.—The *Annales de Gynécologie* (August, 1876,) after referring to a case of recent occurrence in England, in which the new-born child of a woman accustomed to the daily use of opium in large quantities—an ounce or more every week—died in a few hours after taking the breast for the first time, notices the report given in some of the Continental journals of an epidemic observed in the environs of Rome which was traced to a singular origin. A large number of persons were attacked with gastro-intestinal irritation, characterized by diarrhœa, vomiting, intense thirst, and a notable reduction of the temperature of the body, and of the frequency of the pulse. After some investigations, the physicians were led to suspect the *goat's milk*, which is in general use in the locality, as being the source of the trouble. The animals, however, were healthy, and the analysis of the milk and of the dejections of the patients did not reveal a trace of any mineral poison. Suspicion was then directed to the pasturage of the goats, and this was found to contain four plants more or less poisonous, among which were *colchicum autumnale* and *conium maculatum*. The milk and the vomited matters being analyzed again, were found to yield the chemical reactions characteristic of *colchicine*, and the mystery was thus unravelled.

"The two new examples of poisoning which we have just related," adds the *Annales*, "are very interesting to note, and teach us, in administering certain toxic substances, never to lose sight of the possibility of similar accidents, and that we should take the utmost care that the animals which furnish milk for young infants do not ingest with their food substances capable of producing dangerous modifications in the secretion of milk."

Discussion in the Paris Academy of Medicine on the Cause of the Puerperal or Uterine Souffle.—This question, though far

from being new, is still so far from being settled, and withal so interesting, as to have furnished the Paris Academy with material for a discussion, extending through five successive weekly meetings of that learned body, in the months of June and July last. A summary of this protracted debate, in which the eminent and now venerable Professor Bouillaud, and the clever and distinguished Professor Depaul, were the leading combatants, is given in the *Annales de Gynécologie* for July and August.

The occasion of the discussion was the presentation of a paper by M. Glénard, of Lyons, "On the Abdominal Wall, and the Maternal Souffle of Pregnant Women;" and, perhaps, the most notable points connected with it were the singular theory of this sound propounded by that writer, and the fate which the theory encountered. "The fundamental experiment of this theory is the following: The compression of a pulsating vascular cord, which may be detected by palpation at points exactly corresponding to the course of the first portion of the *epigastric artery*, causes the maternal souffle to disappear, instantaneously and totally, in the whole of the corresponding region, whatever be the rhythm, the intensity, or the character of that souffle, and whatever be the distance intervening between the point of compression and the field of stethoscopic examination. The souffle re-appears as soon as the compression is withdrawn. Such is the experiment which has led M. Glénard to the conclusion that *the epigastric artery is the exclusive seat of the souffle of pregnancy*."

M. Bouillaud having, in opening the discussion, utterly repudiated this theory, M. Glénard came to Paris, and undertook, by repeating his experiments on pregnant women in their presence at the obstetrical clinic, to convince M. Bouillaud and other members of the Academy that he had verily solved the mystery of the souffle; but ill-luck attended his efforts, and he was unable in a single instance to cause the disappearance of the puerperal souffle by compression of the epigastric artery. This "epigastric theory" was thus at once eliminated from the discussion; and M. Glénard was not even allowed to enjoy the poor credit of having originated it, for it was shown that Kiwisch, in Germany, had put forth such an idea more than twenty years ago.

The real issue in the discussion before the Academy was between the theory which ascribes the puerperal souffle to the compression of the pelvic arteries (primitive, external and internal iliac) by the gravid uterus, and that which locates it in the highly developed and anastomosing arteries of that organ—Bouillaud advocating the former doctrine, and Depaul the latter. We con-

sider it unnecessary to follow these learned adversaries through the lines of argument pursued by them respectively, in which we find little that is novel; but content ourselves with stating that, in the opinion of the *Annales de Gynécologie*, Depaul got the best of the argument, and made good his conclusions, which are as follows:

"1. The puerperal sound almost always has its source in the hypertrophied arteries of the uterus, and is characterized by consisting of a *souffle without pulsation*.

"2. All the arteries of sufficient size situated on the walls of the pelvis or of the abdomen may also give rise to a *bruit de souffle* when they are subjected to adequate compression, but this sound, which is much more rare, is distinguished from the preceding by the fact that it consists of a souffle with pulsation."

*Ozone—Its Value in Nature.** (Extract from Dr. C. LENDER's Address before the Botanical Society of Berlin.) *From the German.*

Let us refer to the labors of those naturalists who have worked at the bottom of our atmosphere for the purpose of demonstrating the importance of oxygen. Dr. Foley, who experimented on man—not on animals—found that oxygen causes sleep as well as appetite, just as the increase of oxygen, by labor and cold, induces sleep. Hence, in 1856, he could have stated that as oxygen is essential to the brain, it is necessary to produce sleep by a chemical agent, under given circumstances, only when the hypnotic effect of oxygen cannot be secured.

About the same time, Demarquay announced that, by the administration of oxygen he had saved the lives of some who had become exhausted by excessive hæmorrhages, and who had accordingly lost billions of red, oxygen-attracting blood discs. Birch is satisfied that by the use of oxygen we may prevent certain bowel troubles. Preyer proved on animals, and Limousin on man, that an increased supply of oxygen to the lungs increases the amount of carbonic acid discharged from the blood without quickening the pulse. Since, in the ordinary process of combustion, the development of heat and light is markedly increased by an increased supply of oxygen, we learn, first, that respiration (as Priestly had already stated) resembles combustion, though the process is not the same; and, secondly, that the

*The views of Dr. Lender, we are informed by Dr. A. H. Smith, of New York city, have been so far adopted that the readings of his ozometer are embodied in the meteorological reports of some of the German stations.

development of carbonic acid within the living body, and its expulsion, are two distinct processes as to time and the parts involved.

Those who believed that carbonic acid is the most noxious element of the air of occupied rooms, or who attributed many of the common complaints to an accumulation of carbonic acid within the system because of imperfect expiration, were compelled (by the observations of Preyer and of Limousin) to urge the introduction of oxygen into dietetics. But these physiological observations were like those chemical discoveries just mentioned—treasures awaiting further development. It was the oppressiveness of the sick room which, in 1868, gave rise to the question, What is Nature's disinfectant? This inquiry at once quickened the mind for the tiresome labors, of which only the most important can here be mentioned. Two serious diseases, the causes of which were unknown (glaucoma and acute rheumatism), were shown to be usually the result of blood poisoning, due to the impure air of dwellings and to the bad quality of the drinking water.

About the same time (1869), a great man and a noble physician, Prof. Dr. Ludwig Boehm, was poisoned while dissecting a body at Berlin. He well knew that he must die, as Nature's great disinfectant was not yet known as such. Now, however, we may affirm, as did Achard, in 1779, in reference to the foul air of occupied rooms, that poisoned blood, too, may be purified by oxygen.

Experiments on man in 1868 proved that nothing short of a very great number of cubic feet of oxygen can properly purify the blood. But later experiments showed that oxygen itself, raised to the temperature of the human body, cannot prevent the decomposition of organic matter. They furthermore proved that active vibrions formed a strong filaceous network, even in water charged with oxygen, under a pressure of ten atmospheres. These experiments were but another proof of the truth discovered by chemists and physiologists, that ozone (electrified oxygen) is active, and does not act simply as oxygen.

Ozone is a form of oxygen which, in a very high degree, absorbs heat and discharges it, and by this process reduces itself to oxygen. Ozone, acting like the atmospheric gases in greatly lessening the cooling of the earth's surface during night, is very important to the vegetable kingdom. Its chief virtue is its absorbing property, which is just as marked at a low temperature as that of oxygen at a high temperature. Hence, ozone is the most energetic supporter of combustion with which we are acquainted. And as ozone, by its greater affinities, acts more

powerfully, it is an agent of greater importance than oxygen.

* * * * *

According to Shönbein, His, and Kühne, the red blood-corpuscles especially attract ozone, taking it from some bodies and imparting it to others. Air heavily impregnated with ozone when inhaled is exhaled absolutely free of ozone. Hoppe-Seyler, in 1863, concluded that oxygen in the blood had the same effect upon sulphuretted hydrogen gas as ozone. Prof. Von Gorup-Besanez, by numerous experiments, proved that the exceedingly high absorbing power of the human system was almost entirely due to the alkaline state of the blood and to the ozone which it contained. In 1862, Alexander Schmidt proved that normal blood contains ozone, even though oxygen has been inhaled, and that the red corpuscles themselves absorb so much oxygen as to develop it into ozone. Shönbein and Preyer, from this very fact, thought that that most powerful poison, prussic acid, caused death within a few minutes by suffocation—that is, just as quickly as death could result from a sudden check to the supply of oxygen; for prussic acid deprives the red blood discs of the power of converting atmospheric oxygen into ozone; while, on the other hand, impaired oxygen induces chemical changes in the blood and in the system only after it has been made active.

It was as late as 1870 that ozonized water was introduced as a medicine, although it was not until 1872 that Prof. Carius (who died April, 1875,) satisfactorily proved that pure ozone is soluble, to a considerable extent, in water. In 1874, he stated that water near the freezing point might be charged with $\frac{8}{10}$ ths of its own weight of ozone. In 1875, Prof. John Dogiel, of Kasan, demonstrated that blood poisoned by carbonic oxide gas may be restored to its normal state by ozone. Thus we have, besides O_2 and O_3 , two different forms of water which support the system, and which may be taken in large quantities, as they contain the essential supporting element.

Ozone may be absorbed by oils of turpentine, of lemon, &c. These fluids can change O_2 into O_3 . If turpentine remains mixed for a length of time with oxygen (O_2), it acquires the properties of ozone (O_3). In 1851, Shönbein discovered the combustive principle in turpentine, and since then it has been known as the antidote in phosphorus poisoning; and Thiernesse, President of one of the medical schools at Brussels, and Dr. Cas-sel have shown by 22 experiments that this antidotal effect depends solely upon the oxygen which it contains, and which Shönbein calls *ozonized oxygen*, and Oscar Loen, *oxygen in a state of free atoms*.

Shönbein, as did Blanche and Taddei, found that the proto-

plasmic parts of almost all vegetables contain ozonizing elements which give a deep blue color to guaiacum. To test this, macerate the parts of plants containing the protoplasm in water, and then expose them to the open air for some minutes; they will impart to guaiacum a blue color, which color is due to oxidation. This fact is fully explained by a prior disengagement of ozone.

No examinations have yet been made to show what influence certain plants have upon oxygen and ozone. * * * *

The sources of ozone at present known are:—

1. Evaporation—especially from the surfaces of the salt water of the earth and ocean, and other fluids.

2. Electricity, although hyponitric acid is also developed by the discharge of both negative and positive forms of electricity.

* * * *

3. The combustion of alcohol, hydrogen, &c.

4. Attraction, especially such as occurs between porous bodies. * * * *

Shönbein distributed sensitive paper and scales, by which to note the colors, to several meteorological stations, so as to measure the amount of ozone in the atmosphere. Shafer for seven years at Dantzic, and seven years at Coblenz, made observations at 6 A. M. and 6 P. M., at 10, 20, and 40 feet above the surface of the earth. The result was, he found a greater amount of ozone in the atmosphere along the seashore and on the heights near Elbing than in the city of Dantzic. At the same time it was observed that its combustive quality increased according to the elevation above the surface of the earth. The fact always observed near the salt works at Kissingen, that the air was more richly filled with ozone, led to the discovery, in 1871, that ozone is developed by the evaporation from salt water. In 1872, Prestel stated that it was observed that during the years 1858–1867 a lessened amount of rain caused an *increase* of mortality during the succeeding few months, while an increased amount of rain was followed by a *decrease* in the mortality—at least, so far as Emden was concerned. Glaisher had already stated that the highest regions of the atmosphere examined contains neither water no ozone. * * * * This powerful agent suddenly decreases during the month of October, and pervades the lower strata of the atmosphere until the middle of December, when it gradually rises again until it reaches its highest point in May. It falls very slowly from this climax until September, when it shows the same lessening density as in May and October. It is evident from this statement that the sunlight is the main source of the terrestrial forces. * * * *

Dove asserts, that by the measurement of ozone in certain

localities, we can explain why certain regions are more healthful than others. * * * * *

For the last 20 years, Profs. Boehm and Hornstein have measured the quantity of ozone in the atmosphere at the Observatory in Prague in Bohemia. Besides these authorities, Profs. Resslerhuber, of Kremsminster, Wolff, of Berne, Howzeau, of Rouen, and Beringy, of Versailles, have each proved, by careful observations, the correctness of Prestel's opinions, that the principal cause of change in the composition of the atmosphere is the direction of the winds. At the Observatory in Prague, where the amount of atmospheric ozone on the east and west sides, is simultaneously determined, we may at any time observe that equal if not more marked variations occur on the west side. Evaporation from the ocean, which covers about two-thirds of the earth's surface, is unquestionably the chief source of atmospheric ozone. The number of rainy days decreases from West to East. As the Western wind bears the ocean's salty vapors over the continent, as shown by spectroscopic examination, we are compelled to conclude that the ocean ozone is transferred by the winds far away over the Continent. Hence, of course, the ozonoscopic rose of the compass differs according to locality and elevation.

Prestel is right in affirming that without a knowledge of the results based on a long observation, it is impossible to state whether this or that atmosphere is rich or poor in ozone for a given period of time—although local influences may somewhat modify results. For instance, the average quantity of ozone at Emden is 6.25 per cent., while, at Kræken, 4.37. Variations in the quantity of ozone during the year, like all other atmospheric changes, depends upon definite laws. The constant want of ozone in the air of dwellings, according to Andrews, proves that we always breathe foul air in closed rooms. Prestel, who has acquainted himself with the monthly and annual average amount of ozone along the east of Friesland, can state in advance whether the contagious ague of the Moors will prove to be a mild or a fatal epidemic. But as we cannot predict the state of the air of secluded sections of country—which cannot be mechanically purified by the winds, or chemically by ozone, so we sometimes find that homes on the mountain sides and along the sea shore become the birth-places of various infectious diseases. * * * * *

It has been positively asserted that the breathing of ozone, instead of heightening fever and inflammation, absolutely diminishes their severity. This fact is another proof of the correctness of the opinion of Priestley, that breathing is very similar

to, though not identical with, the process of combustion. This fact, added to the fact that all the effects of oxygen can be more quickly produced by ozone is another proof that the continuous development of a given amount of ozone is an important supporter of life, and causes a direct increase of strength. It shows moreover that the physiological combustion, (that is to say, all the processes in which oxygen takes an active part), is very essential to the living cell, sustains the life of the growing animal cell, supports the life of the fully developed cell, and acts, besides, as a disinfectant to dead matter, and to the animal cell which has but a short life. * * * * *

Proceedings of Societies.

MOBILE MEDICAL SOCIETY.

(Reported by W. D. Bizzell, M. D.)

Rigidity of the Os Uteri and its Proper Treatment.—Dr. G. Owen (leader) stated that rigidity of the os, such as seriously to compromise or totally to obstruct the proper delivery of the child, might be due to two causes: First, Mechanical obstruction, or rigidity due to the presence of cicatrices or carcinoma of the os uteri. Second, Vital obstruction, or rigidity due to misdirected vital force, or undue excitement of a physiological character. It is in reference to this latter class of rigidity that he wishes to speak this evening. Of course, where we have extensive carcinomatous or cicatricial deposits in the os or cervix, delivery can only be effected by recourse to the dangerous operation of incising the os, as is sometimes recommended, or to the Cæsarian section. He held with Schultz that labor, or that series of physiological processes by which the product of conception is delivered, begins, not as some suppose, a few hours or days before the termination of that process, but actually commences at the close of the twenty-fourth week, by a gradual obliteration or dilatation of the cervix from above downward. (The leader here showed the plots of Schultz illustrating this point.) This process is accomplished by a gradual relaxation of the circular fibres of the cervix from above downwards, not complete, but partial, as compared with the longitudinal contraction, and draw the partially relaxed cervix further and still further over the foetal ovoid, and it is the completion of this process that constitutes the delivery of the child. But suppose that at some stage in this last act of delivery, say when the os will merely admit the finger, or even when it has attained the size of a silver dollar, it refuses to

dilate further, and, after hours of waiting, no progress has been made, what are we to do? The leader maintained that this would depend on the condition of the patient and the character of the pains. If the pain is purely reflex, as it should be during the first stage of labor, and the patient retains her strength, as she will do for an extraordinary long time under pain of this character, no interference is demanded. But if the woman who has been encouraged to make bearing-down efforts before the completion of the first stage of labor, and without advancing the process of delivery, begins to show signs of exhaustion, then the accoucheur should lend his art to her assistance.

As to the causes that produce this state of vital rigidity, the leader stated that we not unfrequently see cases that are obscure as to the particular exciting cause, though in all cases he thinks that is due to vascular or nervous excitement, and, according to the leader's experience, the most fruitful cause of such excitement is premature bearing-down efforts on the part of the woman.

The anxiety incident to such cases, and the difficulties in the way of management, are facts which every accoucheur of large practice has experienced; and it was mainly his object to call attention to a plan of treatment lately published in Great Britain, with the strong endorsement of Dr. Barnes—a remedy, however, which is only to be used after the failure of milder measures. In the treatment of such a case, when the os had reached the size of a silver dollar, for example, and, after due waiting, refused to enlarge further, unless the woman was very much exhausted, a dose of morphine would, in most cases, give the woman some rest and sleep, from which she would awake with the pains efficient, the os soft, and labor would soon be accomplished. Chloral he had also seen act well in such cases, and chloroform inhalations are a valuable resource. One or the other of these well-known remedies will, in many cases, produce the desired result; but suppose the woman is already exhausted when first seen by the physician, or that one or more of the above remedies have been tried without affording any relief—the patient's strength and courage are gone and the os still small and rigid—it is in just such cases as this, of partial dilatation, with rigidity, that the mechanical treatment practised successfully by Dr. Maguire, and endorsed by Dr. Barnes, affords relief. The bag of waters having already been ruptured, if the woman begins to show exhaustion, do not wait till the exhaustion is complete, but introduce the long forceps through the partly dilated os, and grasp the foetal head, not with the intent of forcibly dragging it through the contracted opening, but by gentle traction to cause the circu-

lar fibres of the os to slide upwards over the smooth wedge shape of the forceps, and thence over the forceps.

Dr. Owen stated that this procedure had been practised recently with great success by many of the leading obstetricians of England, who give it their unqualified endorsement; thought that, in properly selected cases, it would prove a most valuable resource to the obstetrician under the most trying circumstances, though he had never seen but one delivery effected with forceps where the os was not fully dilated. In this case, all the usual means had been tried without avail. Finally, as the lady, after a more than two days' struggle, was becoming alarmingly exhausted, the physician in charge, with Dr. Owen's consent, applied the forceps and delivered her of a dead child, though the os was only dilated the size of a silver dollar. The lady had an alarming hæmorrhage after delivery, due, no doubt, to her exhausted condition, but eventually made a good recovery.

Dr. Gaines wished to know if venesection was tried in the above case.

Dr. Owen said it was not, though the patient was a primipara, and somewhat plethoric.

Dr. Gaines thought if she had been bled the os would have yielded. He also wished to recommend small doses of tartar emetic, repeated to the point of producing more or less nausea, in those persons of plethoric habit whom you did not wish to bleed. He said that he had tried it with the best results in many cases. He thought that there were very few cases of rigidity that would resist the therapeutical measures at the command of the physician at the present day, and said he had no objection to the search for new methods of treatment, but let us not forget in the meantime that which has proven itself good in times past. As to mechanical means, he should greatly prefer the use of Barnes' dilators to the forcible introduction of the forceps. He would be afraid to apply the forceps through an undilated os, though he must say that the management of Barnes' dilators were, in his hands, the most troublesome things to manage he had ever undertaken.

Dr. Ketchum said that we must remember how nature in normal labors effects dilatation, and the use she makes of the bag of waters in effecting it. If the waters have been ruptured, then the best substitute would be something like Barnes' dilators. He would greatly prefer to use the fingers than to attempt to use the forceps in the manner that had been mentioned. He believed that there were very few cases that would not yield to therapeutic means properly directed, and regarded bleeding as a most efficient and safe remedy in plethoric females.

Dr. Cochran maintained that when a real rigidity existed, the forceps could not be introduced, and where they could be introduced, it was an evidence that delivery was possible, so far as rigidity was concerned, without them.

Dr. Toxey wished to know what to do in case the os was not even dilated sufficiently to introduce the forceps, or even scarcely the finger—the only reply to which important inquiry was that he might try the Barnes' dilators.

ABSTRACT OF PROCEEDINGS OF THE MICHIGAN STATE BOARD OF HEALTH AT THE REGULAR MEETING, OCT. 10, 1876.*

The members present were Dr. H. O. Hitchcock, President; Dr. R. C. Kedzie, Dr. A. Hazlewood, Rev. C. H. Brigham, and Henry B. Baker, Secretary.

Dr. Kedzie presented two drawings, illustrating his paper on "Ventilation of Railroad Cars;" ordered to be published in the Annual Report.

A paper on the "Water-Supply in Michigan," was presented by Dr. Kedzie. The paper treated of the geological formation of the State as affecting the water-supply, the mechanical and chemical effects of the different kinds of soil upon the water filtered through them, of the impurities usually found in water-supplies, of graveyards and other sources from which these impurities frequently arise, and of methods of improving the quality of waters now used. It stated that the only *sure* way to detect impurities in water is by a careful chemical analysis. Yet there are tests which can be applied by any one which give strong *probable* evidence, such as smell before and during boiling, taste, and especially Heisch's test, which consists in the addition of half teaspoonful of pure sugar, to a pint of the water in a bottle partly filled, set in a warm, well lighted place for 48 hours. The presence of cloudy matter indicates impurities. The paper is to be published in the Annual Report.

Dr. Baker presented additional material for a paper on the "Death-Rate as Influenced by Age, Climate, etc.," consisting of tables, charts, maps, diagrams, etc., and mentioned that he had found a way by which a comparison of the death-rates of different States could be made without the necessity of computing a life table for each locality.

Dr. Hitchcock read a paper on "Criminal Abortion," showing that the present laws in this State have been derived from

**Mr. Editor:* Herewith please find manifold copy of abstract of Proceedings of last meeting of Michigan State Board of Health. It is sent to a few of the journals that are received by the library of the Board, for such use as each of you may see fit to make of it.

Very respectfully,
HENRY B. BAKER, Secretary.

views held in past ages, and are not in conformity with our present knowledge of physiology. The paper will be published in the Report.

Dr. Hazlewood read a paper upon "Water," based largely upon the replies of correspondents to a circular sent out by the Board. He stated the chemical composition of water, the impurities usually found, the amount needed by each person daily for all purposes, which he placed at 100 gallons at least; the healthfulness of different kinds of water, the sources of the water-supply of this State, the way to obtain the best cistern water, and the danger of using water which had been in contact with lead pipe. The paper will be published in the Report.

Dr. Baker read a paper on the "Cause of Chorea," reviewing the evidence lately published by Dr. Geo. T. Stevens, of Albany, New York, and some other not heretofore published.

Dr. Baker read a report on "Methods of Collecting Vital Statistics," in which he urged an amendment to the present law, which he held would increase the value of the statistics and not materially increase the cost of collection. A proposed circular of instruction relative to the restriction and prevention of Scarlet Fever, was discussed at length, and is to be revised and issued for the benefit of the public health in Michigan.

A circular to correspondents, asking for statements of cases and of facts concerning Scarlet Fever was also discussed and is to be issued when perfected.

A communication from J. H. Buck, M. D., was read, giving the details of the drowning of nine persons at Bawbeese lake and containing suggestions for the prevention of similar occurrences. It was received with thanks. Dr. Beech also reported the unusual prevalence of diphtheria at Union City, and suggested that it afforded an opportunity for studying its causes.

The annual report of property, expenditures, etc., was also made; the time having been changed from April to October. This report covers a period of six months only. The following are the items: Chemical analyses, \$10.00; engraving, drawing, etc., \$125.00. Expenses of members—attending meetings, \$52.75; other official, \$58.05. Instruments and books, \$14.90; paper, stationery, etc., \$12.90. Postage—office, \$177.55; members, \$4.00. Printing and binding, \$46.45; Secretary, \$1000; special investigations, \$———. Miscellaneous—express, \$29.45; otherwise, \$20.17. Total, \$1,551.22.

The property on hand consists of stationery, meteorological and other instruments, and more particularly the library, which is continually increasing in value.

Analyses, Selections, &c.

Physostigma Faba in the Convulsive Diseases of Children.

Dr. G. S. Trezevant, of Columbia, having found no reference in the books, to the use of this drug in the class of cases indicated, places on record (*Trans. S. Carolina Med. Assn.*, 1876) several illustrative cases—all of which show that the effects of the drug are prompt in affording relief. The remedy was suggested by the benefit which the reporter had derived from its use in a case of tetanus, and in numerous cases of cerebro-spinal meningitis.

West says, in reference to the convulsions of children, that : "The great reason of their frequency is, no doubt, to be found in the predominance of the spinal over the cerebral system in early life. In adults, the controlling power of the brain checks the display of those reflex movements which become at once evident if disease heightens the excitability of the spinal cord, or cuts off the influence of the brain from the paralyzed limb, or if sleep suspends the influence for a season," Such being the peculiarity of childhood, if we possess an agent capable of neutralizing and keeping in check this predominance of the spinal over the cerebral system, by controlling the reflex activity of the spinal cord, it would prove of vast service in our treatment of infantile diseases, complicated with convulsions.

In June 1875, an infant, æt. five months, had cholera infantum, followed by an obstinate diarrhœa, which improved until a relapse occurred on July 2d. Upon checking the diarrhœa, a tympanitic condition of the bowels ensued, and opisthotonos, so decided as to make a complete arch, which effectually prevented swallowing. Dr. T. ordered alcoholic extract of physostigma, gr. $\frac{1}{32}$ to be given at once; repeat the dose in two hours if not relieved. An hour after the second dose, the Doctor found the patient completely relaxed and able to nurse, and, without further relapse, she slowly recovered.

March 9, 1876. A boy, æt. eleven months, had capillary bronchitis. Two days later, the disease was not improved; but the child was in general convulsions; temperature 104. 5°F.; respiration 80. To relieve the convulsions, Dr. T. ordered one grain of the extract of the bean to be rubbed up with thirty minims each of glycerine and water. Of this one drachm solution, three minims were given in teaspoonful of water. No decided effects having occurred within three quarters of an hour, the dose was repeated, thus administering $\frac{1}{10}$ th grain of the extract within an hour. Two hours after the last dose, the child

was conscious and was trying to nurse; the convulsions had entirely ceased an hour earlier. The child remained entirely free from convulsions for four hours, when there was a slight threat, upon the occurrence of which the Doctor ordered a repetition of the dose, to be continued every three hours if needed. Two doses were given during the night, and there were no more convulsions. There was no improvement, however, in the lung, and the child died on the 13th. The Doctor thinks "it sufficiently evident that the convulsive paroxysms were controlled" by the remedy.

M. Bouchut (*Bulletin General de Therapeutique*) gives the results of 437 experiments, performed with eserin, the active principle of calabar bean, the subjects of which experiments were children from 7 to 12 years of age, suffering from cholera in all stages and varieties. The medicine was sometimes administered by the mouth, sometimes hypodermically; dose from $\frac{1}{35}$ to $\frac{1}{40}$ th of a grain; the physiological effects produced by $\frac{1}{4}$ th grain, injected under the skin, were pallor, nausea, salivation, intense *malaise*, and occasionally vomiting; no colic or *diarrhœa* occurred; pupils often remained unaffected, sometimes dilated, sometimes contracted, always active; abundant perspiration was sometimes noticed; retinal veins were contracted, and the fundus of the eye pale. The most disagreeable symptom which occurred was an enfeeblement, or even paralysis of the diaphragm; no unpleasant sequelæ were observed. The most suitable dose for hypodermic use is $\frac{1}{28}$ th of a grain; this never causes any disagreeable effects, and may be repeated twice or three times a day. Next, as regards the remedial effects of the drug, the *choreic* movements are invariably arrested, as long as the physiological effects of the injection lasts; when this has passed off they return, but usually in a less severe form. Daily injections cure the disease in an average period of ten days.

Dr. McLaurin (*Edinburgh Journal*, vol. II, page 319) reports a remarkable case of *tonic convulsions*, which persisted for many months—the fits recurring several times a day. There was no loss of consciousness, but rigidity of the limbs, the head being drawn towards the left shoulder, and twitching of the features of the same side. Every remedy was fully tried in vain, and the condition of the patient was growing steadily worse, when it was determined to try physostigma. The dose was gradually increased, until the equivalent of 4 grains of the bean was taken four times a day; it reduced the pulse temporarily to 58, and excited a gastric uneasiness, which is peculiar to its operation, but the pupil remained unaffected, and from the first the patient slept better at night; then the intervals between the paroxysms

became longer and the attacks less severe, until, at the end of five or six weeks, they ceased altogether.

In another case, reported by the same party, in the *London Lancet*, a little girl $4\frac{1}{2}$ years old, who had had convulsions four or five times a day for nine months, not a single attack occurred after the first dose of the medicine. Why should we not find this drug efficacious in puerperal eclampsia?

Dr. Frayser says the anæsthetic effects of physostigma may be applied to the treatment of all nervous diseases.

In a case of *chorea*, supervening upon an attack of cerebro-spinal meningitis, Dr. T. has seen great benefit derived from $\frac{1}{12}$ th of a grain of the solid extract given three times a day to a child 9 years of age; and in the two cases referred to above, the excessive irritability of the bowels seemed to be decidedly lessened.

Practical Illustration of the Metric System.*—To understand the metric system properly, and to use it intelligently, a person should forget the units of length, volume, and weight to which he has been accustomed; and should, at once and definitely, familiarize his senses with the new measure, as they are brought into daily use, irrespective of the old system. It is simply an arbitrary rule which makes a grain of opium a medium dose for an adult; it may be a maximum dose for one, and a minimum for another. In order to carry out this idea, the author has arranged a table of doses, on the metric system, of dangerous remedies, very nearly approximating those commonly used, care being taken never to exceed them. The doses of other remedies can be estimated by the tables.

The metric system was first suggested by French scientists about the year 1790, with a view of making all measures of length, volume, and weight uniform throughout the world. It comprises the following units of measure:

The metre, the unit of length = the ten millionth part of the terrestrial meridian, or the distance between the pole and equator = 39.37079 inches.

The litre, the unit of capacity = a cube of the tenth part of a metre = .26418 gallon.

The gramme, the unit of weight = the weight of a cubic centimetre of water at its maximum density (4° Cent.) = 15.4323+ grains. Practically, in medicine, the gramme, with its subdivisions expressed in decimals, is adopted as the unit of weight.

*Copyright, Francis H. Brown, M. D., 1876. For assistance in the preparation of this article, the author is indebted to Dr. Robert Amory, of Brookline, and Prof. G. F. H. Markoe, of Roxbury. [Note by Editor.—The day is so near at hand when the metric system will become generally adopted by the practitioner as in every respect more convenient, that we take the liberty of reprinting this article, which is given in the recent edition of the *Medical Register for New England*, published by H. O. Houghton & Co., Boston. This article should be preserved for ready reference.]

and the cubic centimetre, or a measure of one gramme of water, as the unit of volume.

The following table shows the relation between the old and the metric system, and may be employed in conversion from one to the other: 3j (Troy) = 480 grains = 31.11 grammes (grms.)

3j = 60 grains = 3.887 grammes.

3j = 20 grains = 1.295 gramme.

1 grain = .0647 gramme.

3j avoirdupois = 437.5 grains = 38.30 grammes.

Oj = 473. cubic centimetres (c. c.).

f3j = 455.56 grs. = 29.53 cubic centimetres.

f3j = 3.69 cubic centimetres.

1 gramme = 15.4349 grains.

1 cubic centimetre = 16.2 minims.

The following prescriptions, written in the metric system, are offered for illustration, in the first place, of the method of using the system; and secondly, of the facility of dividing the dose in proportion to the age of the patient, the first column representing the dose for an adult, the others for children of seven, four, three, two, and one years, respectively. Especial care must be given to the use of the decimal point in all prescriptions in the metric system:

	(1)	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{12}$
R Magnesiae sulphatis,	31. grms.	10.	8.	5.	4.	2.5
Ferri sulphatis,	2. "	.7	.5	.3	.25	.16
Quinae sulphatis,	.30 "	.1	.075	.05	.04	.025
Acidi sulph. aromat.	8. c. c.	2.6	2.	1.3	1.	.65
Spiritus chloroformi,	2. "	.6	.5	.3	.25	.16
Aquaë, q. s. ad	240. "	80.	60.	40.	30.	20.

M. et. S. "Dose, tablespoonful, etc."

R Quinae sulphatis,	2. grms.	.7	.5	.35	.25	.016
Ext. Nucis vomicae,	.5 "	.17	.12	.08	.06	.04

M. et f. pil. no. xxx.

MAXIMUM DOSE IN THE METRIC SYSTEM.

(From "L'Officine," D'Orvault.)

Acetate of morphia,	.02	Digitalis (leaves),	.20
Acetate of lead,	.05	Hyoscyamus (leaves),	.20
Arsenious acid,	.005	Nitrate of silver (fused),	.02
Arsenate of potassa or soda,	.005	Nux vomica,	.10
Belladonna leaves,	.20	Opium,	.05
Belladonna powder (root),	.15	Phosphorus,	.01
Binioidide of mercury,	.02	Squills (root),	.20
Cantharides, powder,	.03	Strychnine (or salts of),	.01
Colocynth,	.10	Sulphate of copper,	.10
Cherry laurel water,	2.00	Sulphate of zinc,	.15
Corrosive sublimate,	.02	Toxicodendron,	.30
Cyanide of mercury,	.02	Veratria,	.01
Cyanide of potassa,	.03		

Druggists might use for liquids a graduated class to indicate

in cubic centimetres the weight in grammes. This would by no means, however, give a correct estimate of heavy or light liquids—such, for instance, as chloroform or ether. On the other hand, a druggist would dispense these liquids, when prescribed in small quantity, by counting the number of drops required in the prescription. At 15° Cent., or 59° Fahr., twenty minims of pure or distilled water would weigh one gramme (or exactly 5 centigrammes less than one gramme). At the same temperature twenty minims of

	Grammes.		Grammes.
Caustic soda (at 36°), weigh	1.250	Tincture of aconite, . . . weigh	.397
Syrup (at 35°),	1.111	Tincture of belladonna, . . .	.391
Hydrochloric acid (density 1.17),	9.50	Tincture of colchicum (seeds),	.390
Aqua Ammoniac (at 23°), . . .	.909	Tincture of colchicum (bulbs),	.356
Fowler's solution of arsenic,	.868	Oil of turpentine, . . . . .	.385
Nitric acid (density 1.42), . .	.861	Tincture of valerian, . . . .	.384
Glycerine, . . . . .	.837	Chloroform, . . . . .	.370
Hydrocyanic acid (118), . . .	.804	Tincture of aloes, of digitalis,	.344
Sulphuric acid (density 1.84),	.700	Tincture of arnica, . . . . .	.340
Laudanum (Sydenham's*), . .	.588	Alcohol (at 90°), . . . . .	.335
Castor oil, . . . . .	.465	Alcohol (absolute), . . . . .	.311
Olive oil; sweet almond oil,	.427	Hoffman's Anodyne, . . . . .	.294
Camphorated oil, . . . . .	.408	Tincture of digitalis (etherial),	.270
Essence of peppermint, . . .	.400	Sulphuric ether, . . . . .	.263

*Contains one-third more opium than in the Tinct. Opii U. S. P.

An inspection of the above table shows that no reliance can be placed on the ratio between the density of a fluid and the weight of a minim.

In order to ascertain the number of drops of a fluid in a certain weight, first find the number of drops in a gramme, and multiply this number by the given weight. In order to ascertain the weight which corresponds to a number of prescribed drops, take one-twentieth of the fraction indicated in the above table, and then multiply that quotient by the number of the prescribed drops.

For water, $f_{3j} = 60 \text{ M}$, or 3 grammes. One millilitre, or one cubic centimetre of water, weighs one gramme. Thus a graduated measuring glass divided from 500 grammes to 1 gramme can be used with the same accuracy that we now use the graduated glass divided into ounces and drachms.

Comminuted Fracture of Liver.—Dr. W. H. Drury (in November No. of *Ohio Medical Recorder*) reports a case of this accident due to fall from a railroad car, verified by post-mortem. There was laceration of the right lobe of the liver, parallel with the longitudinal fissure and gall bladder, and on the right side of the latter, which extended half way back or across. About two drachms of liver were found detached and lying in the abdominal cavity.

A New Method of Treating Hæmorrhage after Abortions and at Full Term, when Due to Uterine Inertia.—H. Otis Hyatt, M. D., of Kinston, N. C., in October No. of *Amer. Jour. Obstet.*, publishes a method to which he has resorted during the last four years for the arrest of this troublesome and sometimes alarming accident, when due to uterine inertia.

The procedure is simple, safe, and effective, and up to now has never failed in a single instance in which I have used it. It consists in passing into the cavity of the uterus a rubber bag, which is afterwards distended by means of air or water—preferably water—until it fills the entire uterine cavity. The bag will press in the direction of the least resistance, and adapt itself to all the little inequalities of the placental site. We thus, without using any great amount of force, bring sufficient elastic pressure to bear upon the mouths of the bleeding vessels to effectually seal them, and render further hæmorrhage an impossibility.

The hæmorrhage being arrested, we can leisurely direct our attention to inducing uterine contractions, by kneading the uterus, and the administration of ergot, either by the mouth or hypodermically. When uterine action sets in (and it occasionally will immediately after the flow has ceased, especially if ice-water be used to distend the bag), we can allow the air or water to escape from the bag *pari-passu* with the contractions, or better, allow it to remain. The bag, being elastic, is easily moulded to the parts through which it has to pass, and will be expelled just as the bag of waters would, and at the same time continue to act as a valve to the bleeding vessels until the womb is so thoroughly contracted that further hæmorrhage will cease.

These rubber bags have a tube attachment similar to Barnes' dilators, and for cases that occur before the fifth month of gestation has passed, a large Barnes' dilator can be so distended as to fill the entire uterine cavity, even should the walls be so relaxed that the organ can be distended to as great an extent as it had been by the foetus and secundines. I have never seen a uterus so thoroughly paralyzed that it would admit of such great distention, and I doubt very much whether one could be distended by a rubber bag to such an extent, from the fact that the bag has a tendency to give way at the point of least resistance, and would be likely to bulge from the os unless the os was contracted very firmly—an occurrence, I believe, that never takes place in uterine inertia. This tendency of the bag to bulge can be exemplified by taking one in the closed hand and distending it; it will be seen to pop or bulge out between the thumb and forefinger.

On no occasion have I ever found it necessary to distend the uterus to as great an extent as it was before delivery took

place, and I have never had to wait more than two hours for the uterus to expel the bag and become firmly contracted. Should ever occasion require me to carry the distention to so great an extent, or to wait even a day for the uterus to regain tone and power sufficient to expel the bag, I should have no fears in doing so, being fully assured that it could be re-aroused to contractions, and that involution would go on normally.

This method has several advantages over those that are usually employed for the arrest of post-partum hæmorrhage. Even leaving the elastic pressure out of the question, it is better than passing ice into the uterine cavity, should we be disposed to rely upon cold as a means of astringing the blood vessels and inducing contractions of the uterus. We can inject the bag with ice-cold water, and save the woman the annoyance of a cold bath to the buttocks, which will surely take place as the ice in the uterus melts and the water runs from the vagina. Its advantage over pressing the placental site with the hand is considerable. First, it is perfectly reliable; the distended bag will cover the entire site, which the hand will not always do; and, besides, there is not the least danger of bruising the uterus, as there would be if one were placed against the placental site on the inside of the uterus, and the other is pressed against it from the outside of the abdomen.

Over the persulphate of iron injections, its greatest advantage is its perfect harmlessness. We run no risk of inducing metritis or puerperal septicæmia; and, besides, we avoid the disagreeable stickiness of the hands that one is sure to have if the hands are brought in contact with the iron injection. But the chief and greatest advantage it has over all other methods is that it can be more speedily resorted to and does its work more quickly, one or two minutes generally being long enough to fully distend the bag and check the flow. Second, that it is perfectly harmless, and the most awkward need not hesitate to resort to it. Even should the bag burst, which is the only accident that can possibly happen, we simply wash out the uterus, which can do no harm—that is, if the bag had been filled with water, which, I think, is best and safest, though I have frequently used air and had no accident to happen.”

Dr. Hyatt details reports of three illustrative cases.

Epilepsia Abortiva.—Reported by John W. Martin, M. D., Dronfield, late Assistant-Surgeon Mayfield Factory, Portlaw, Ireland, in *Medical Press and Circular*, Nov. 8, 1876.—A case of this nature fell under my observation the other day, which I think worth recording, from the strong impression left upon my

mind at the time of the possibility of a violent attack being made by persons so affected, without any consciousness on their part of what was passing.

J. L., a young man, æt. 20, a miner by occupation, presented himself at my surgery for medical examination. His medical history recorded two attacks of rheumatic fever; one light, occurring some years ago; the other heavy, lasting thirteen weeks, from which he was only three weeks convalescent. A careful examination of the various organs detected nothing abnormal beyond a slight increase in the area of cardiac dulness, and a weakening of the first sound of the heart.

The epileptic seizure took him almost immediately at the conclusion of the examination. During the attack, he retained control over the muscles of the lower extremities, being able to stand upright, had I allowed him to do so, throughout. The eyes were fixed and staring, pupils widely dilated, but their expression was not void of all intelligence. The muscles of the face, neck, and arms were strongly affected, the convulsive movements being very decided and severe. He also appeared to feel something at the epigastrium, as he placed his hand there frequently, making very strong pressure, as if to give relief. There was decided mental confusion, but the attack did not terminate in the usual state of stupor and sleep.

The general expression was that of a drunken man, who seemed doubtful whether he ought to be quarrelsome or friendly; at one time the former state of mind seemed so imminent that I was quite prepared for a violent attack being made. The fit passed off in about ten minutes, when the patient seemed conscious of something unusual having taken place, but ignorant of its true nature. I afterwards learned that he has been subject to similar slight attacks since the first fit of rheumatic fever from which he suffered some years ago.

To Destroy Warts.—Mr. Frank Baker, of Mineral Springs, Arkansas, uses argent. nitras, ʒj. dissolved in acid. nitro-murias ʒj. Apply with a fine brush. Cure in four days.—*Canada Medical Record*.

Differing only in Orthography.—A young lady recently on being asked what business her lover was in, and not liking to say he bottled soda-water, answered, "He is a practising fiz-zician."—*Medical Press and Circular*.

Book Notices, &c.

Transactions of the Texas State Medical Association, 8th Annual Session. Held in Marshall, April 4-7, 1876. Dr. R. H. Harrison, Marshall, President; Dr. W. A. East, Hallettsville, Secretary. (Pp. 212-x).

The Society has a number of correspondents outside of the State. One of them, Dr. T. G. Richardson, of New Orleans, recommends a resolution "deprecating the easy method by which candidates are sometimes rushed into the ranks of the profession." The standard for membership in a State Society should unquestionably be of such grade as would make the bare fact of membership an endorsement in itself—especially as we have so few State Boards of Examiners to attest qualification.

Another matter demanding attention in other States than Texas, is the resolution by Dr. J. B. Robertson, asking the Legislature to demand proper competency of druggists, &c.; and, further, to prevent the sale of such articles as morphine, strychnia, opium, arsenic, &c., except upon the prescription of a physician. Virginia has just taken a similar step.

The *President's Annual Address* (by Dr. H. W. Brown, of Waco) urges the consideration of the subject of establishing a medical department in connection with the State University (for which provision has been made by Texas). "A medical department of such a University * * * will serve, as in Virginia, to elevate the standard of scientific attainment, and reflect honor, credit and beneficence upon the State." The speaker's remarks, in favor of popularizing our knowledge of medicine, are well timed. "Educate the people in all established principles of medicine, that we may save them from the dangers incident to ignorance of them—from the snares of unprincipled charlatanry, &c." Very sensible views are also expressed in regard to the manner of securing medical legislation. "Unite the whole profession (as the people understand it), * * * and as one man, petition, importune, and wrestle, if need be, with our Legislatures." "No ethical quibbles or therapeutic disputations must be allowed to distract attention, or confuse the purpose of appeal."

The paper, by Dr. R. H. L. Bibb, of Austin, on *Eucalyptus Globulus*, is the essay to which the prize, offered by Dr. T. J. Heard, was awarded. Under the head of "medicinal properties," strange to say, we find not a word regarding the uses of the agent. All that relates to therapeutics is discussed under the heads of

sanitive properties and physiological action. Some confusion, however, is occasioned by the printers or binders, who, somehow or other, have got pages 73, 76, 77 and 80 repeated, and have omitted pages 74, 75, 78 and 79.

Dr. John H. Pope, of Marshall, Chairman, presented the *Report on the Science and Progress of Medicine*. It is a good report, so far as it goes, but is too brief—no mention even being made of some things now exciting attention. The better part of it in reality considers new remedies and some therapeutic questions.

Dr. Thomas D. Wooten, of Austin, Chairman, presented the *Report on Gynecology*. Too much space is taken up in recounting the older theories of the development of uterine derangements. A curious instance of careless composition occurs in the sentence, on page 108, "Ovariectomy, ruptured perineum, vesico-vaginal fistula, constriction or tortuosity of the cervical canal, prolapsus uteri, etc., are now constantly performed." In regard to pessaries, we might mention the value of Dr. Young's instrument for anteversion, which was introduced by Dr. Sims at the session of the Medical Society of Virginia, 1875. This instrument gives satisfactory results in a large number of cases.

Dr. W. J. Burt, Chairman, presented the *Report on the Anatomical and Physiological Differences between the White and Negro Races, etc.* The paper points out some of the absolute differences between the two races. Many questions of interest arise that we cannot now discuss for want of space. We wish the Doctor, before preparing his report, had seen those on the same subject by the late Dr. T. P. Atkinson in the *Transactions of the Medical Society of Virginia*, 1872 and 1873.

Dr. J. R. Taylor contributes to the *Report on Climatology and Epidemics*. He calls attention to "the cotton-plant as influencing, very materially, in some way," the development of malaria. The subject merits further study. Dr. J. T. Norris, of Brenham, also contributes to the same *Report*, and appends a thermometric table. Unprecedented good health has prevailed during the past two years. During the winter an irregular, hybrid form of eruptive fever culminated in well marked, undoubted measles. The irregular manner of approach or development of some one of the exanthemata has frequently been remarked, and the questions of how and why would well repay study.

Dr. A. R. Kilpatrick reports on *Indigenous Medical Resources*. *Silphium laciniatum*, or rosin-weed, he recommends in all derangements of the kidneys. *Xanthium strumarium*, or cockle-bur, is a prompt and speedy vesicant; is antidotal to

snake bites, &c.; all affections of kidneys or bladder are said to be benefited by it. *Malvus Drummondi*, or Spanish apple is "a most excellent demulcent," much better than *ulmus fulva*. *Alnus rubrum*, or tag alder, is one of the best alteratives for cutaneous diseases. *Helleborus foetidus*, or bear-foot, has a soothing or discutient effect upon painful tumors. Knowing nothing of the plants, we only state the conclusions of the reporter.

Dr. Greenville Dowell describes a *New Method of Reducing the Medio-Glenoid sub-Clavicular Variety of Dislocation of the Humerus*. Place a porter-bottle on the side of the thorax, under the arm, high up towards the axilla; this bottle serves as a fulcrum. Grasp the dislocated arm just above the elbow, and make extension backwards, outwards and downwards. The *latissimus dorsi*, *pectoralis major*, and *teres major* assist in pulling the head of the bone into proper position during the operation.

Dr. S. R. Burroughs, of Grey's Store, reports three cases of *Imperforate Hymen in Virgins* which required surgical relief. Two of the cases show the great necessity of always carefully examining the urino-genital organs of children at birth; malformations may then be easily corrected. Neglect of duty at this time, entails great suffering, constitutional disturbance and much embarrassment in after life. The second case reported demonstrates that a peculiar sympathy may be excited between the uterus and *mammæ* by *retentio mensium*. None of the cases exhibited symptoms attributable to the "results of regurgitation of the retained liquid through the Fallopian tubes, although uterine contractions were excited by the increasing volume and continued presence."

The rest of the volume contains reports of cases, which, though of interest, are virtually lost to the profession at large by not being contributed to journals. *Transactions of Societies* are not the proper media for such reports. No one, outside of Texas, will scarcely ever hear of some of those we here find detailed. Among such interesting cases are some of *Diphtheria*, by Dr. T. J. Heard; *Lithotomy by Fergusson's Method*, by Dr. W. H. Park, of Tyler; *Tracheotomy for Diphtheria*, by Dr. B. F. Eads, of Marshall; *Chronic Cystitis* treated by injections of nitrate of silver, by Drs. Murph and Long; *Sessile Polypus in Female Meatus Urinarius*, by Dr. T. J. Heard; *Excision of Hip-joint for Coxalgia*, by Dr. J. W. Halcom; *Amblyopia from Retinitis Pigmentosa*, and *Aspergillas Glancus in Auditory Canal*, by Dr. T. B. Manning; *Retained Fœtus*, by Drs. Kilpatrick and A. E. Ford; and of *Labor in a Primipara with Double Vagina*, by Dr. J. W. Finnell.

A Practical Treatise on the Diseases, Injuries, and Malformation of the Urinary Bladder, the Prostate Gland, and the Urethra. By SAMUEL D. GROSS, M. D., LL. D., D. C. L., Oxon., Professor of Surgery in the Jefferson Medical College, Philadelphia. Henry C. Lea, 1876. Pp. 574. (For sale by West, Johnston & Co., Richmond.)

This is the "third edition, revised and edited by Samuel W. Gross, A. M., M. D., Surgeon to the Philadelphia Hospital," of a work already well known to the profession, although it has been several years out of print. This edition is illustrated by 170 engravings, and contains statistics of lithotomy prepared by Dr. C. H. Mastin, of Mobile.

We had marked several paragraphs, in reading this work, that we had desired to bring prominently to the notice of the reader—not in any spirit of criticism, but simply as expressive of the views of the author, whose ripe experience and careful observation have given him an eminence excelled by no one. It may be remarked, however, that there are a number of practical suggestions that are derived from the experience of the common run of practitioners which, though perhaps of altogether insignificant importance as a part of the discussion of the subjects, are yet of practical interest to physicians in general practice—for instance, the substitution of hypodermic syringe for an aspirator in relieving a distended bladder, when the latter instrument is not at hand; the use of slippery elm bougies in many of the so-called impassable strictures, etc. The mention of these and similar suggestions, which are, of course, familiar to the author, might often have lessened the embarrassment of the general practitioner when in "a tight place."

Notwithstanding some of the objections which have been lately urged against rapid, as well as gradual, dilatation of the female urethra for the extraction of calculi, Dr. Gross says the method is not liable "to be followed by incontinence of urine." Hence, we suppose, he places dilatation first in the various plans practised for relieving the female bladder of stone, since this operation is undoubtedly the most readily performed of all the operations suggested.

But we must not be tempted into even a running synopsis of the contents of the work, since necessity compels an economy of space in this issue. The bare mention of the fact that Prof. Gross has written the book is satisfactory proof to every American that it is authoritative, and that the practice recommended is in every way to be relied on as fully up to the times. The author has admirably succeeded in making a practical work for the physician as well as surgeon.

Yellow Fever and Malarial Diseases. By GREENSVILLE DOWELL, M. D., Professor of Surgery in Texas Medical College; formerly Professor of Anatomy in Galveston Medical College, etc. Philadelphia: Medical Publishing Office, 1876. Pp. 241. (From the Publishers.)

The long residence of the author in malarial sections, his extensive fields of observation, growing out of a large practice, the fact of his having had in his own person nearly all the diseases of which he writes, and withal the well earned reputation which the author enjoys of having been an earnest student in his profession—these things, with the honored position he holds in the esteem of all who know him, combine to give Dr. Dowell a pre-eminent right to be heard on the subjects of which this book treats.

The work embraces a history of “the epidemics of yellow fever in Texas; new views on its diagnosis, treatment, propagation and control; descriptions of dengue, malarial fevers, jaundice, the spleen and its diseases, and diarrhoea hemorrhagica; with practical remarks on their successful treatment, etc.” The chief object of the author is to furnish “a rational and definite mode of diagnosis of yellow fever.” Another special design of the work is to “assist boards of health and health officers in diagnosing infectious diseases from those that are not infectious.” The text is illustrated by a well designed map of the yellow fever zone in the United States, and by chromos, showing the color of the skin, the liver and the intestines in *extreme* cases.

We have no disposition to criticize our author's new suggestions. We cheerfully concede that his vast experience and observation forestalls any opposition from him who has never seen a case of yellow fever. All that we can do is heartily to commend the work to every one interested in the study of the subjects brought forward. Dr. Dowell's work is but the honest record of a vast experience, written in plain terms, and full of valuable information. The work should be in the hands of every health officer of seaport towns, and every practitioner where yellow fever is known to occur, or where malaria has a controlling influence over the usual run of diseases.

Transactions of the College of Physicians of Philadelphia Third Series. Vol. II. Philadelphia: Printed for the College, and for sale by Lindsay & Blakiston, 1876. Pp. 186. lviii. 800.

The value of the *Transactions* of this society has become established, wherever the English language is spoken. This

volume opens with a memoir of Dr. George W. Morris, prepared by Dr. Wm. Hunt; and this is followed by one of Dr. John S. Parry, prepared by Dr. James V. Ingham.

We can state only the titles of articles, the fact that they appear in the volume, being in itself evidences of their worth: *A Case of Empyæmia*, in which after Dieulafoy's Aspirator had been repeatedly used, a permanent cure followed the introduction of Chassaignac's drainage tube into the chest, with remarks by James H. Hutchinson, M. D., one of the Attending Physicians to the Pennsylvania Hospital, etc.; *Case of Hepatic Abscess occurring in a Child*; Evacuation by puncture through the abdominal walls; recovery, by Louis Starr, M. D., Assistant Physician to the Episcopal Hospital; *Report of the Committee on Meteorology and Epidemics for the year 1875*, by Richard A. Cleemann, M. D., Physician to St. Mary's Hospital; *Operative and Conservative Surgery of the Larger Joints*, by John Ashhurst, Jr., M. D., Surgeon to the Episcopal Hospital, and to the Children's Hospital, etc. This report relates especially to excision of the knee, and amputation of the thigh for disease of the knee-joint. A number of cases of excision of the knee-joint are given, with recovery with useful limb. Then follows the report of two successful *Cases of Excision of the Knee in Adults*, by H. Lenox Hodge, M. D., Demonstrator of Anatomy in the University of Pennsylvania, Surgeon to the Presbyterian Hospital, etc. The remarkable success of these cases should encourage the hope of better results than the generality of surgeons have usually had from this operation. Dr. Solis Cohen, Lecturer on Laryngoscopy and Diseases of the Throat and Chest in the Jefferson Medical College, contributes a short report on the *Therapeutic Uses of Compressed and Rarefied Air*. We have had occasion to commend the author's views in the notice sometime ago made of his book on "Inhalation: Its Therapeutics and Practice." Professor Harrison Allen, M. D., contributes a *Note on the Anatomy of the Perineum*. Dr. S. Weir Mitchell, the most favorably known of all the "neuralogists" of this country, contributes *Cases illustrating Local Injuries of Nerves and their Trophic Consequences, with Comments*. Dr. George C. Harlam, Surgeon to Will's Hospital, gives a paper on *Hysterical Affections of the Eye*, which is a very important contribution. Dr. Wm. S. Forbes, Senior Surgeon to the Episcopal Hospital, reports some cases of recovery after *Gunshot Wounds of the Thoracic and Abdominal Cavities*. Dr. J. Cheston Morris gives an interesting account of a *Case of Calculous and Cystic Degeneration of Both Kidneys*, with autopsy. Prof. J. Ewing Mears, M. D., reports two *Cases of Sarcomatous Tu-*

mor; one of the *Lower Jaw*, involving the *Masseter Muscle*; the other, of the *Parotid Gland*, involving the *Masseter Muscle*—*Removed by Operation*. The case reported by Prof. James Tyson, M. D., of *Diabetes Insipidus* [beneficially] treated by *Ergot and Gallic Acid* concludes the volume. We have known of several instances of apparent, if not real, cure by *jaborandi*.

Chemistry: General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia. By JOHN ATTFIELD, PH. D., F. C. S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain; Honorary Member of the American Pharmaceutical Association; Honorary Member of the Colleges of Pharmacy of Philadelphia, New York, Massachusetts, Chicago, and Ontario, and of the Pharmaceutical Associations of New Hampshire, etc. Seventh Edition Revised from the Sixth (English) Edition, by the Author. Philadelphia: Henry C. Lea, 1876. 12 mo. Pp. 668. (For sale by West, Johnston & Co., Richmond).

The long list of honorary positions which Dr. Attfield holds from Societies in this country, to say nothing of those he enjoys from European quarters, which we have not stated in the above caption, at once attest his ability and popularity in America as an author. The former editions have been so favorably received that it is not necessary to remark upon the qualifications of the author for the task he has undertaken. As a chemist, his reputation is world-wide. The special value of the present edition consists in its conformity to the Pharmacopœia of the United States. The studious care with which Dr. Attfield has done his work, makes the volume only second in importance with American physicians and apothecaries, to the National Pharmacopœia or the United States Dispensatory. "In short, the work now includes the whole of the Chemistry of the British Pharmacopœia, of the Pharmacopœia of India, and of the United States Pharmacopœia." It also serves in every particular as a manual on the general principles of the Science of Chemistry.

Lectures on Fever. By WILLIAM STOKES, M. D., D. C. L., OXON., F. R. S., Regius Professor Physic, University of Dublin, etc. Edited by JOHN WILLIAM MOORE, M. D., F. K. Q. C. P., Assistant Physician to Cork Street Fever Hospital, etc. Philadelphia: Henry C. Lea, 1876. Pp. 264. (For sale by West, Johnston & Co., Richmond).

Every reader of the *Medical News and Library* (published by Mr. Henry C. Lea) for the past eighteen months, has been

profited by this remarkably clear and practical series of Lectures which were delivered by the Author, at irregular intervals, in a general hospital. It is not necessary for us to commend the book—the voice of the profession has already adopted it as the authority. It only remains for us to add that the American publisher has collected the leaves as printed with the successive issues of the journal named, and has bound them in book form for convenient reference.

Theory of Medical Science. By WM. R. DUNHAM, M. D., Boston: James Campbell, Publisher, 1876. 16mo. Pp. 150. (From Publisher).

The title page of this book starts out with the assertions that the doctrine of an inherent power in medicine is a fallacy, and that “the ultimate special properties of vitality, and the laws of vital force constitute the fundamental basis of medical philosophy and science.” It contains simply the substitution of the word of one man for the voice of the profession generally. “I hope to make plain,” says the author, “that the relation which we maintain to the material world is ordained on the plan that all action, on the part of, or expressed by the living tissues, is a primary vital action.” We must add, however, that what he has written is well done, and is very readable; and, indeed, his exposé of homœopathy may entitle the work to a popular sale.

Studies, chiefly Clinical, in the Non-Emetic Use of Ipecacuanha: with a Contribution to the Therapeutics of Cholera. By ALFRED A. WOODHULL, M. D.; Assistant Surgeon and Brevet Lieutenant Colonel, U. S. Army, Philadelphia: J. B. Lipincott & Co., 1876. Pp. 154. 12mo. (For sale by West, Johnston & Co., Richmond).

We do not know when we have thought so much of a remedy as we do now of ipecac, after reading this exceedingly interesting and instructive little book. It is strange that a remedy, regarding which so much of good was known by our fathers in medicine should have fallen so completely into disuse. We frankly confess that, with the exception of prescribing it occasionally as an emetic or diaphoretic, etc., we had no experience with ipecac until our attention was attracted to it by some papers which appeared in the *Atlanta Medical and Surgical Journal* about a year or two ago. Since then we have been in the habit of prescribing it in pill form in dysentery with a result that is perfectly satisfactory. Indeed, we have been surprised that, as recommended by the author, in dysentery ʒj or more of ipecac

“may be taken into the stomach without emesis.” We are told by our author that all other therapeutists than Waring, “who have had no personal experience with it, look upon the drug as necessarily emetic” in such doses.

On this very point, Dr. Woodhull makes an excellent argument (pg. 122) in favor of the clinical rather than the physiological classification of drugs. A scruple of unadulterated Rio Ipecac will cause vomiting in a healthy person; in cases of dysentery, it not only relieves the tenesmus, checks the frequent discharges, &c., but also allays the nausea sometimes so annoying.

We cannot stop so discuss any of the theoretical points urged by Dr. Woodhull in explanation; his statement of facts are all substantiated by numerous witnesses. The important clinical or therapeutic uses which he has verified in regard to non-emetic doses of ipecac are thus tabulated: In dysentery, painful intestinal affections, cholera morbus and cholera infantum, certain kinds of hæmorrhages, excessive perspiration, some forms of dyspepsia, nervous vomiting as of pregnancy, asthma and nervous coughs, delirium tremens, opium poisoning, neuralgia, as an antiperiodic, and febrifuge, in pneumonia, puerperal conditions, acute hepatitis, antidote to venom, and its topical effect as in conjunctivitis. It would be unjust to the author, and not promotive of scientific interests to say that for each of the purposes named, ipecac is to be used specifically or in the same manner or dose. For details, we must refer the reader to the book itself, which we heartily recommend to the practitioner.

A Manual of Percussion and Auscultation: of the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By AUSTIN FLINT, Professor of Principles and Practice of Medicine, and of Clinical Medicine in the Bellevue Hospital, Medical College, etc. Philadelphia: Henry C. Lea, 1876. Pp. 255. 12mo. (For sale by West, Johnston & Co., Richmond).

The object of this manual is that it “may be found useful, not only to medical students engaged in the practical study of percussion and auscultation, but as a hand-book for reference, to the practitioner of medicine.” The eminence of the authority on the special subjects of which this manual treats makes any remarks unnecessary as to the correctness of the statements or as to the comparative value of the work. We may, however, express the regret that Dr. Flint had not extended the scope of the volume so as to have included physical diagnosis of diseases

of other parts of the body. It is only necessary to announce the publication of the work to insure its purchase by all who are particularly interested in this special field of study.

The Student's Guide to Dental Anatomy and Surgery. By HENRY SEWILL, Member of Royal College of Surgeons and Licentiate in Dental Surgery; Dentist to West London Hospital, etc. Philadelphia: Lindsay & Blakiston, 1876. Pp. 203. 12mo. (For sale by Woodhouse & Parham, Richmond).

Every country practitioner is at times called upon to render some service which, in our cities, is referred to the dental surgeon. In view of this fact, he is constantly in need of a manual relating especially to the diseases of the teeth. Here is one that seems to us to be exactly what he needs—a cheap handbook that is free of needless theories, and full of practical statements both as to diagnosis and treatment.

Walsh's Physician's Combined Call-Book and Tablet has already become so popular as to demand the issue of a second edition. See circular advertisement in this issue. However highly we may have spoken of the first edition, we are compelled by the merits of the improvements made in this second edition, still more earnestly to recommend it to all in need of a Visiting List. As to the special copy sent us, however, the printer composed his form wrongly—throwing the printed head lines first on the right hand page and then on the left. All the printed and ruled call-list pages should have been on the left hand side as the book is opened.

The Physician's Visiting List and Complete Pocket Record, prepared by Dr. JAS. J. HALL, of Anna, Illinois, is simply a visiting list, and contains no advantages, so far as we can see, over an ordinary blank book, except that the pages are ruled for names of patients, the days of the week and brief remarks. There are some who prefer this style—without calendar, without a list of poisons and antidotes, or preparations and doses of medicines, etc. We confess, however, to a personal preference for a visiting list that does contain a calendar, tables of poisons, and antidotes of incompatibles, of quantities not to be exceeded in prescriptions without the use of caution marks, &c.

A Monthly Digest of Current Literature in Medicine, Surgery and Obstetrics is to be begun at North Vernon, Indiana, January, 1877, Dr. J. S. SHIELDS, editor. "Every number will contain 72 double column pages of carefully selected reading

matter." Annual subscription \$2.50. The purpose of this Journal is commendable, and the zeal manifested by the Editor in his prospectus makes it appear as if he were in real earnest about the enterprize.

We regret the impossibility of noticing in this issue any of the following publications which have been received :

Specimen Fasciculus of a Catalogue of the National Medical Library, under the direction of the Surgeon-General, U. S. Army at Washington. (From Dr. J. S. Billings).

Address on Some of the Leading Health Questions, with Remarks on the Extent of Swamp Lands in the United States, and their Reclamation as a Sanitary and Economic Measure. By J. M. TONER, M. D., Washington, D. C. (Reprint).

Transactions of the Medical Society of the State of Tennessee, 43rd Annual Meeting, 1876.

Transactions of the Medical and Chirurgical Faculty of Medicine, 78th Annual Session, 1876.

Transactions of the Kentucky State Medical Society, 21st Annual Session, 1876.

Transactions of South Carolina Medical Association, 1876.

Analysis of 617 Cases of Skin Diseases. L. DUNCAN BULKLEY, A. M., M. D. (Reprint).

Clinical Study of Herpes Zoster. Same Author (Reprint).

Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture. By GEO. K. SMITH, M. D. (Reprint).

Gastrotomy and Gastrostomy. By J. H. POOLEY, M. D.

Orthopedic Surgery: Deformities of the Lower Extremities. By VAN S. LINDSEY, M. D. (Reprint).

Sketch of the Life and Writings of Louyse Bourgeois, Midwife to Marie de Medici, the Queen of Henry IV., of France. By WM. GOODELL, A. M. M. D. (Published by order of Philadelphia County Society).

Report on Ventilation—Its Philosophy and Necessity. CHAS. H. TODD, M. D., Owensboro, Ky.

Report on Medical Ethics. Same Author. (Reprint).

New Apparatus for Fractures of the Leg. By OSCAR J. COSKERY, M. D., Baltimore.

Three pamphlets from Dr. Sager, concerning University of Michigan, which we read before writing our Editorial in June No. of the Monthly.

A Plea for Principles and Conservatism in the Treatment of Diseases Peculiar to Females, embracing the Report of a Case of Superinduced Pseudo-Cyesis, with Results. By WM. ABRAM LOVE, M. R. (Reprint).

Thirty-Seven Operations of Thoracentesis by Pneumatic Aspiration.

By FRANK DONALDSON, M. D. (Reprint).

Syphilis of the Nose and Larynx. By CLINTON WAGNER, M. D.

Hoarseness and its Causes. By CLINTON WAGNER, M. D.

Remarks on Intra-Uterine Polypi, with special reference to their Diagnosis and Treatment. By REEVES JACKSON, A. M., M. D. (Reprint).

Catalogues of Medical College of University of the City of New York; Bellevue Hospital Medical College; Medical College of Ohio; Woman's Medical College of New York Infirmary; National Medical College of Columbian University.

Editorial.

CODE OF ETHICS—SPECIALTIES AND SPECIALISTS.

Undoubtedly as peculiar a set of resolutions as was ever adopted by any intelligent body is the following: *Resolved*, That this Association recognizes specialties as proper and legitimate fields of practice. * * * * *Resolved*, That it shall not be proper for specialists publicly to advertise themselves as such. * * *Resolved*, That private handbills addressed to members of the medical profession, or by cards in medical journals, calling the attention of professional brethren to themselves as specialists, be declared in violation of the Code of Ethics of the American Medical Association." (*Transactions, etc.*, 1874, pp. 556-7.)

The first impulse of one who reads these resolutions is to suppose that they emanated from some half-witted enthusiast, and had been adopted by the Association at a moment of great confusion and hurry in the session, when the members in reality knew not what they were doing. The last two resolutions, as resultants of the first resolution, are so illogical and ridiculous that it requires an effort to treat them with grave consideration. The subject, however, assumes a serious practical importance when it is found that the Judicial Council of 1874 (whose decision "shall be final") declares that there is, "much false reasoning and needless irritation" concerning the matter, and that there is no reason for any change in the "Code." In view of our high respect for the individual members composing the Judicial Council, and for those whose votes "unanimously

adopted" the report of the Council of 1874, let us briefly examine some of the facts bearing on this subject.

In the first place, we are much surprised that the Council, who ought to know the laws, should state that "the Code of Ethics very properly makes no mention of specialties or specialists." An ordinance of the American Medical Association *does* mention the subject. This ordinance, enacted in 1869 and in force at the present time, affirms that specialties are "proper and legitimate," while another clause of the same ordinance goes even so far as to declare it a "*violation of the Code of Ethics*" for specialists to advertise themselves as such. To all intents and purposes, then, these resolutions are virtually a part of the existing "Code." The decision of the Council, at least, gives to them all the importance attached to a codal provision.

Let us at once come to the arguments of the Council on the subject of this editorial. It is held that "If specialists * * * are members of the profession, it follows logically that they must be governed in all respects by the same ethical principles as the general practitioner." We will waive, for the present, any discussion as to the "ethical principles" which *should* govern the general practitioner, as our space is too limited to undertake the solution of side issues. We wish to give more attention to the other important sentence in the same paragraph of the Judicial Council, which holds that "If the one [general practitioners] may not issue cards, handbills, etc., calling the attention of those laboring under *particular* diseases to themselves, neither can the other [specialists], without violating the principles of both justice and equity." [Italics ours.] It is strange that the error in this proposition should seemingly have for a long time eluded the critic's eye. The very moment that a so-called general practitioner calls "the attention of those laboring under *particular* diseases" to himself, that moment he enters the field of the specialist—he makes those "*particular* diseases" the object of special attention. It needs no argument to show to even the most prejudiced that the inferential premise of the proposition laid down by the Council does not so much as even relate to the subject of which the report proposes to speak, and of course the conclusion has no logical effect. We have

here simply an illustration of "running off the track"—this, and nothing more.

But there is another view to be taken of the subject. By common consent, the *general* practitioner is permitted to keep his card in the city papers or in a medical journal, announcing in effect that he offers his professional services as a *general practitioner*. There is nothing wrong in such an advertisement. No man with three grains of common sense, it seems to us, could object to this. Even the "Code" contains no clause that can be construed as opposed to this simple announcement—just so the *general* practitioner does not call "the attention of those laboring under *particular* diseases" to himself. Now, if the general practitioner can advertise himself, why may not *specialists*, who occupy "proper and legitimate fields of practice," likewise advertise themselves as such? Upon what rational principle can any objection be based to such an advertisement? It is simply ludicrously absurd to attempt to defend the "Code" on this subject; it manifests only a jealous selfishness for us general practitioners to deny to the specialists the right to advertise themselves. Just think of a student who, by hard toil and prolonged application, and at great expense, has mastered, as we speak of it, some specialty in medicine. He at least knows more about that specialty than all the rest of the physicians of the town or State put together. Were he a general practitioner, he could advertise himself as such; but simply because he knows more about a specialty than any one else with whom it is likely he will come in contact, he cannot let any one know, by a card or advertisement, that he has ever given special attention to his specialty! What ridiculous nonsense! Poor fellow! with all his special qualifications to excel, to do good, and to make an honest livelihood, he must yet live and die victimized by a miserably impolitic and a tyrannical "Code of Ethics."

But the explanatory portion of the report of the Council still further muddles the subject. We have no disposition to discuss the statement that "the title of Doctor of Medicine covers the whole field of practice, and whoever is entitled to that appellation has the right to occupy the *whole* or any part of the field as he pleases." But the absurdity of the next statement should make

us feel ashamed that it ever got upon record, and more ashamed that it has not before been blotted out. Here it is: "The acceptance of this honorable title [Doctor of Medicine] is presumptive evidence to the community that the man accepting it is ready to attend practically to *any and all duties which it implies.*" [Italics ours.] There is no where to be found on the placards and posters of any shameless quack or imposter a sentence which contains more of arrogant presumption. We venture the assertion that there is *no one* whose opinion is worth having who accepts the title of Doctor of Medicine as even "*presumptive evidence*" that the party having it "is ready to attend practically to *any and all duties which it implies.*" No one of the Council is ignorant of the fact that no college in the world can even lecture to the student on every known disease. In short, no practitioner, however wealthy or learned in his profession he may be, can possibly be spoken of as "ready to attend practically to any and all duties" which the title of Doctor of Medicine implies. The very "Code of Ethics" itself denies the truth of the assertion, in that it urges consultations. If a practitioner is presumed to be "ready to attend practically to any and all the duties" of the true physician, then it would be an absurdity to recommend the holding of consultations. In every-day life there is not one of us general practitioners who does not recognize *special* qualifications for a particular purpose in some one or other of our surrounding brother doctors. Let any man interrogate his consciousness regarding himself. Is there any sensible person in the whole "regular" profession who is so ignorant of the vast extent of the field of Medicine already cultivated, or so arrogant as honestly to suppose himself "ready to attend practically to any and *all* the duties" which his title of Doctor of Medicine implies? It would, indeed, be a prodigious intellect that could be even partially "ready to attend practically" to half of the duties of the ideal physician. But we have said enough to show that the assertion of the Judicial Council is too enthusiastic and erroneous.

It is wearisome to follow this report. It is so inconsistent and so short-sighted in its purport, that it seems that a child might detect enough of its many errors to convince him that the "Code" is "childish-weak" on the subjects pointed out.

It seems to avoid altogether any discussion of the real question involved in the subject, as if there was nothing but this surface view to be had of it. It does not even at all discuss what are the essentials of a true specialist as distinct from the presumptuous one. It does not point out the differences between the honorable and respectable specialists and the arrogant quack—things about which the profession generally needs some information. The report simply goes on to say that. "As all special practice is simply a self-imposed limitation of the duties implied in the general title of doctor, it should be indicated, not by special or qualifying titles [why not?], such as *occulist*, *gynæcologist*, etc., but by a simple, honest notice appended to the card of the general practitioner, saying 'Practice limited to diseases of the eye and ear,' " etc. "Such a simple notice of limitation, if truthfully made," could not "be regarded as a claim to special * * * * qualifications." The answer to all this is briefly stated. He who undertakes to adopt a specialty in practice without having some *special qualifications* is a fool or a charlatan. If, on the other hand, one is recognized as having the essential special qualifications to justify his adopting a specialty, which, as we have already seen, is a "proper and legitimate field of practice," why should our niggardly selfishness as general practitioners object to his reaping the honors and benefits of his special qualifications?

THE PUBLICATIONS OF SOCIETY TRANSACTIONS.

The Committee on Publications of the Medical Society of Virginia has just decided to publish the Transactions of the recent session in the January number (1877) of the *Monthly*. As on former occasions, this plan has been determined on without solicitation on the part of the journal. While we feel complimented and encouraged by the favors which this Society has always shown the *Monthly*, it is but just to both parties to say that each is totally independent of the other. The Committee's action, suggested by a resolution of the Society itself, has been influenced chiefly by an economic view. Each fellow of the Society, whether he subscribes to the journal or not, is entitled to a copy of the January (1877) number. The occasion for this action of the Committee can hereafter be easily removed, should there be objection to the plan, if fellows will habituate themselves

to pay their dues at the moment that assessments are levied, instead of waiting a year or two to do so.

Since this plan of publication of the Transactions of the Virginia Society was commenced, we have become fully persuaded that it is the best that can be adopted by any society—especially in those States where but one journal exists, and where, consequently, editorial jealousies and partizan feelings cannot arise between rival journals and their respective friends.

It has been stated in opposition to the plan which necessity has almost compelled the Virginia Society to adopt, that the Transactions are not “reviewed” by other journals—that even that sterling old journal, the *American Journal of Medical Sciences* paid no attention to last year’s publication, although the Transactions of other societies were noticed. Why the reception, at least, of the duplicate copies sent to that Journal as to others, was not acknowledged, is not our business to inquire into. Perhaps it was an oversight on the part of each.

But it is a mistaken notion that society Transactions are generally “noticed” by journals. Having taken some trouble to look into this matter, we find that the *Monthly* gives perhaps more space to “notices” of them than any other journal in America, except the *American Journal of Medical Sciences*. The fact is, so many standard works are now being issued which more imperatively demand notice that journals have scarcely any space in which to note the titles even of society publications. Let the reader refer to our book-notice department in this issue, for instance; it is impossible to give even the tables of contents of many of the publications. Yet, notwithstanding the relatively great amount of space we give to this department, we have not room enough to mention the titles of fifteen or twenty other publications awaiting acknowledgement—such books even as Bristowe’s *Practice of Medicine*, Carpenter’s revised edition of *Human Physiology*, Fox on *Skin Diseases*, Dowell on *Hernia*, etc., etc. Other journals which are in the favor of some publishing houses that do not care for our notices of their publications, have even more works to notice. Hence it is rare for any journal now to have an opportunity to notice Society Transactions. It is useless, therefore, for the advocates of separately bound volumes of Society Transactions to look for “reviews” of them in more than one or two of the journals.

But in reference to the two volumes of Transactions of the Medical Society of Virginia, which have been bound with the *onthly*, even higher compliments have been paid them than are usually conferred by book-notices. Credited extracts have been taken from each volume which has been bound with the

Monthly. Some of these extracts have been going the rounds of the journals ever since their original publication—although the credits have lately got wrong. But we have despaired of keeping credits correct, since we have on more than one occasion found whole articles, reports of society proceedings, etc., originally contributed to the *Monthly*, copied in the following month's issue of other journals, and there made to appear as original matter.

There are other advantages to societies arising from the publication of their Transactions in journals with large and growing circulation. Among them may be mentioned, first, a much earlier appearance of the publication, that is, within a month or six weeks after the adjournment of the session of the society interested. Thus, when the Virginia Society, in the middle of October, 1874, voted to publish in the *Monthly*, the Transactions of that session appeared in the December No. The Transactions of 1875 were published within three weeks after adjournment of the session. And this year's Transactions would have appeared in this (December) issue had circumstances have allowed the Publishing Committee to have decided the matter earlier than November 17th. With other societies where separate publications are made, there is usually an interval of *many months* between the date of the adjournment of the session and the issue of the Transactions. The longer the time that elapses between the announcement of a paper and its publication, the less of interest is manifested in it by readers when it does appear.

Another advantage of the journal-plan of society publications is, that a wider circulation is given the papers. As separate publications, the volumes have an altogether sectional circulation—scarcely any one outside of the State ever sees the contributions to science of some of the ablest pens. Journals, on the other hand are usually taken by the leading men all over the country.

It is a mistake to suppose that journals, as a rule, are going to republish these articles. Indeed, it is seldom that an editor ever sees more than the outside title of Transactions, as he almost invariably passes them over to some friend with the request to prepare a notice. But an editor does examine carefully his *journal* exchanges for the latest views or facts to go into the departments for selections in his next issue.

Did our space permit, we would point out other advantages of the journal-plan of Society publications, which would altogether outweigh the single argument of *more dignified appearance* of separate volume Transactions. Societies that use the journal-plan become better known and must exert a wider influence

than if they limit their publications to purely local or sectional volumes, and which must, in the nature of things, remain unknown to the outside world. As a matter of economy, also, the journal-plan suggests itself.

The Pinel Hospital.—In response to inquiries, we will say that the Act of the Virginia Assembly under which this hospital is founded provides that insane persons may be admitted on terms now provided by law for their admission into the public asylums of the State of Virginia, viz: Upon complaint, under oath, in writing, by any two of the relatives or friends of the party (the two giving bond) that the party is an habitual drunkard or opium-eater, lost to all self-control, and unfit to attend to any business; and that the party would probably be benefited by treatment in the Pinel Hospital, any justice may issue a warrant upon such an affidavit as above, ordering that such person be brought before him; and if he and two other justices, upon written examination, find the alleged facts to be true, they shall commit the person to the Pinel Hospital. But no inebriate or opium-eater shall be compelled to remain in the Hospital longer than twelve months without his written consent. Any person feeling himself or herself aggrieved by the judgment of the justices may appeal to the corporation courts of the county in which he or she resides, and the appeal shall be allowed as a matter of right; and the court shall proceed at once, without formal pleadings, to trial (by jury, if demanded) of the question whether the person detained is an habitual drunkard or opium-eater, and lost to all self-control. The justices committing an inebriate or opium-eater are required to certify the fact to the county or corporation court, and the court shall appoint a committee to take charge of his estate.

The importance of such an institution in our midst may be the more readily appreciated by the revelation of statistics, which show that in private practice permanent cures of inebriates are rare, while in asylums or hospitals about 66 per cent. of cases recover. To a learned profession, however, it is not necessary to point out the advantages of such an institution as this claims to be.

Yellow Fever Mortality in Savannah.—A correspondent of the *Baltimorean*—a most valuable weekly family newspaper—under date of November 2, gives the mortuary statistics of that city from September 1st to October 28th, 1876, which, although not complete as to the entire epidemic, is nevertheless correct so

far as it goes. The epidemic began about September 1st, and had materially abated by the time this table was prepared.

Deaths from yellow fever, 817; various causes, 380; total, 1,197. Total whites, 873 [= $9\frac{1}{2}$ per cent.]; total colored, 324 [= $2\frac{3}{4}$ per cent.]. Of these, 419 were children. Daily average of deaths from Sept. 1 to Oct. 28, 20. Special census taken Oct. 28 showed total population 19,291—7,353 whites, and 11,938 colored. Of these, 1,154 were white children under 12 years of age, and 2,932 colored children. There was also of the total population an excess of white females over males, 143; of colored females over colored males, 1,498. The disparity, both as to age and sex, is accounted for by the number of absentees—probably 8,000 refugees.

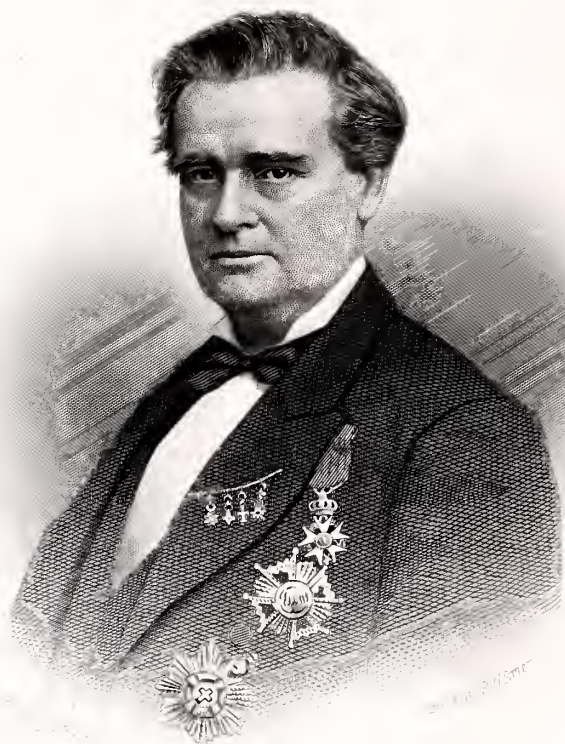
The estimated total number of sick during the eight weeks specified was 12,000. Of the total white population remaining in the city, only about 500 had escaped attack, although after October 28, probably 100 of these 500 were stricken down. Estimated number of doctors' visits, 50,000; doctors' fees on paper, \$125,000; doctors' fees in prospect, \$15,000; estimated apothecaries' sales for medicine, \$20,000; undertakers' charges, \$20,000; rations expended [valued at ?] \$100,000. Besides these expenses, the city of Savannah has lost by this epidemic: Expenses of refugees out of Savannah, \$500,000; loss of sale of merchandise, two months, \$500,000; loss of taxes to the city, \$50,000; loss of rents and depreciation of property, \$250,000; number of bales of cotton diverted to other points, 50,000.

The number of doctors who have died, 2; prostrated 12; apothecaries assistants died, 7; Protestant clergymen died, 2; prostrated, 5; Catholic clergymen died, 5; prostrated 8.

Typographical Error—the statement in the book notice by Dr. Theobald, in our September issue, that he uses a solution of alum of the strength of from one to three grains to the drachm of water. It should have been "to the *ounce* of water. Ulceration of the cornea might be the possible result of the solution as printed. We ought to have a different sign for either the drachm or ounce, as serious errors might accidentally occur by the use of signs so much alike.

Another "typographical" is the word "improved" in the 8th line of page 424. Dr. Wall writes that he wrote *improvised*.

On page 571, October No., in the fourth proposition of Dr. J. M. Woodworth's paper, read *morbific causes* instead of "modifications."



L. Marion Sims M.D.

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Original Communications.

ART. I.—*Biographical Sketch of J. Marion Sims, M.D.* Prepared by HENRI L. STUART, of New York.

This eminent surgeon, the founder of the Woman's Hospital of the State of New York, was born on the 25th January, 1813, in Lancaster District, South Carolina. He was graduated from South Carolina College in 1832, studied medicine at Charleston, South Carolina, and at Jefferson Medical College, Philadelphia, from which he was graduated M. D., 1835. A year later, he commenced practice at Montgomery, Alabama. He soon acquired reputation as a general practitioner, and in a few years rose to the foremost ranks as a surgeon. In 1845 he announced to the profession a new theory of the nature and origin of trismus nascentium, published in the *American Journal of Medical Sciences* (1846 and 1848).

In 1845, he conceived the idea of curing vesico-vaginal fistula, then an incurable affection. For this purpose, he established a private hospital at Montgomery, supporting it wholly at his own expense, where he conducted a series of practical experiments, which, after four years of fruitless effort, eventuated in complete success in 1849. In order to overcome the great difficulties that met him at every step in this hitherto unexplored field of investigation, he was compelled to invent many new instruments, including a speculum that bears his name. The peculiarity of Dr. Sims' world-famous operation for vesico-vaginal fistula consists in the use of silver wire sutures, which remain

saculated in the living tissues, instead of silken sutures. He has since extended the use of metallic sutures to every department of surgery where sutures are needed. About this time (1849), his health failed, and he did not recover it for several years. In 1851, his condition was considered hopeless, and on his sick bed he prepared his paper on the treatment of vesicovaginal fistula (which he supposed would be his last contribution to medical science) and sent it to Dr. Isaac Hays, of Philadelphia, who published it in the January number of the *American Journal of Medical Sciences*, 1852.

In 1853, his health continuing bad, he removed to the city of New York. Fully imbued with the necessity for a hospital in New York for the treatment of the diseases of women, he soon gained the confidence and endorsement of some of the leading members of the profession, such as Francis, Mott, Stevens, Green, Griscom, Gardner and others. But he also aroused a feeling of opposition among other prominent members of the profession, by which he was so discouraged that he at one time contemplated leaving New York and giving up his enterprise altogether; and would have done so but for the wise advice and earnest persuasion of his wife, a noble christian woman, whose faith in her husband's ultimate success never wavered, even in the darkest hours.

About April, 1854, the writer was introduced to Dr. Sims by Mr. Jas. Beattie, of Alabama, became interested in his enterprise, and at once took steps to bring the whole matter prominently before the profession and the public. To this end it was determined to call a public meeting of the profession, where Dr. Sims should have the opportunity of laying his views fully before them. The meeting was held on the 18th May, 1854, at the Stuyvesant Institute, on Broadway, opposite Bond street, and was largely attended by the profession. He there set forth his views, enforcing the necessity for the establishment of such an institution, based on his own experience and discoveries. His simple earnestness and evident sincerity carried conviction; and at the close of his address Dr. John H. Griscom, in a few pertinent remarks, heartily endorsed everything said by Dr. Sims, and moved that the assemblage be organized into a business meeting. Dr. Gardner seconded the motion, and Dr. Edward

Delafield was called to the chair. Dr. Edward Beadle acted as secretary. A vote of thanks was unanimously tendered to Dr. Sims, and the chairman, Dr. Delafield, and Dr. Sims were conjointly authorized to appoint a committee to organize a hospital for the treatment of the diseases of women—Drs. Delafield and Sims to be members of said committee—which was composed as follows: Drs. Edward Delafield, John W. Francis, Valentine Mott, Alexander H. Stevens, Horace Green, J. Marion Sims, Mr. Peter Cooper and Hon. Erastus C. Benedict.

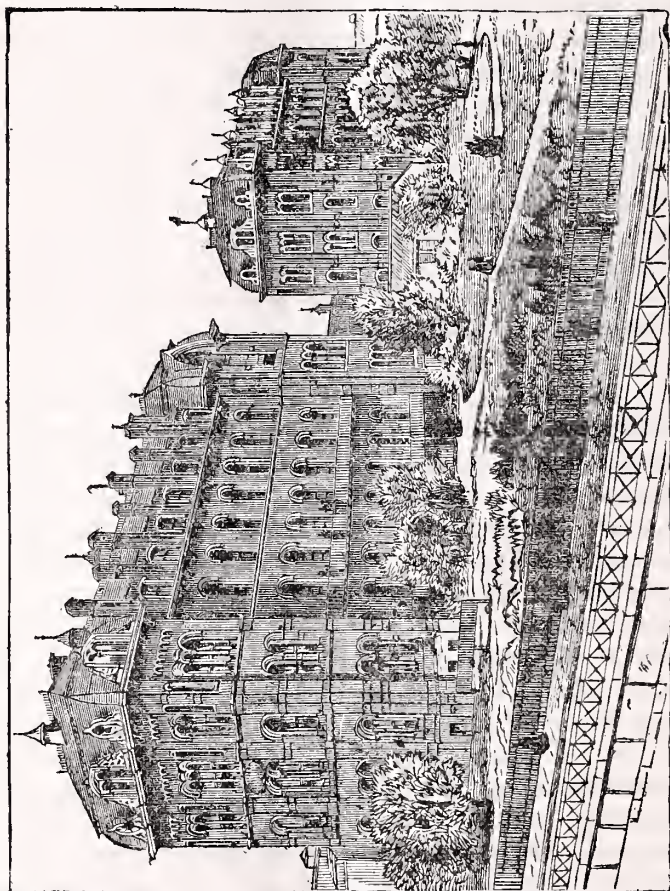
From this auspicious beginning, the Woman's Hospital Association eventually arose. It was composed of thirty-five ladies, occupying the highest social position in New York. Its officers were: Mrs. David Codwise, First Directress; Mrs. William B. Astor, Second Directress; Mrs. Ogden Hoffman, Third Directress; Mrs. Jacob Le Roy, Treasurer; Mrs. T. C. Doremus, Assistant Treasurer; Mrs. Fordyce Barker, Secretary.

Mrs. Elisha Peck, Mrs. Erastus C. Benedict, Mrs. Peter Cooper, Mrs. Abram S. Hewitt, Mrs. H. J. Raymond, Mrs. Walden Pell, Mrs. James Brooks, Mrs. Thos. Mason, Mrs. Caroline Thompson, of Springfield, Mass., and Mrs. J. Marion Sims were most efficient co-workers in establishing the Institution. Mrs. Caroline J. Hewitt, of Minnesota, was the first Matron. To Mrs. Thos C. Doremus is due the credit of organizing the first Board of Lady Managers of the Woman's Hospital, selecting such names as would be most influential in the community, and indicating to Dr. Sims such as should be placed at the head as officers, while she modestly took the place of assistant treasurer. Mrs. Doremus is now First Directress, and takes the same interest in the Hospital that she did at the beginning.

A suitable building on Madison Avenue was leased for three years, at a rental of \$1,500 a year, through the exertions of Dr. Sims and Mr. Stuart, and an appropriation of \$2,500 was secured from the Common Council, and a temporary hospital was opened in May, 1855. Dr. Sims was elected surgeon-in-chief, with Drs. Mott, Stevens, Francis, Delafield and Green as a Consulting Board. The amount of labor and effort required on the part of Dr. Sims before any working impression could be made upon public attention was very great, but when that impression was made it brought in a wonderful tide of popularity and success.

The new Hospital opened under favorable circumstances, and was soon filled with patients from all parts of the country. The remarkable cures performed by Dr. Sims, and the successful management of the Institution, attracted general attention ; and very soon demonstrated the necessity for establishing a large and permanent Woman's Hospital.

After various efforts made to utilize the "Bard fund" without success, Dr. Sims, assisted by the Hon. Jas. W. Beekman and the Hon. E. C. Benedict, in 1857 obtained from the Legislature a special charter for the "Woman's Hospital of the State of



The Woman's Hospital of the State of New York.

New York." In 1858 the State also appropriated \$50,000 for its aid. Soon after, the Common Council of the City of New

York, on an appeal from Dr. Sims, presented by Hon. Franklin J. Ottarson, member of the Board of Councilmen, gave an entire block of ground between Forty-ninth and Fiftieth streets, and Lexington and Fourth avenues, near Central Park, and opposite Columbia College, as a site for the new Hospital. This property, 200×400 feet, is now valued at over half a million dollars. The Common Council also appropriated \$10,000 for it.

In 1860 a design for the Woman's Hospital was adopted by the Board of Governors. It was not on the pavilion plan, and Dr. Sims was not satisfied with it; and in 1861 he went abroad for the express purpose of studying hospital architecture, taking letters to many distinguished personages, among them one from Lady Franklin to Florence Nightingale. His observations abroad satisfied him that the pavilion system was the correct one, and on his return home, in January, 1862, he submitted through the architect, Mr. Henry S. Harrison, plans on this system, which were adopted by the Board of Governors. One of the pavilions was ready for the reception of patients in 1866. The second is now being completed.

While in Europe, Dr. Sims operated by invitation in many of the great hospitals of Dublin, London, Paris and Brussels, with unflinching success, receiving the warmest welcome and the most generous recognition, and was at once acknowledged as a great discoverer and teacher by the most renowned surgeons, and his operations pronounced the most remarkable achievements ever made in surgery.

He performed operations in many of the hospitals in Paris, by invitation of the surgeons attached to them. He operated in the presence of large classes for Velpeau, at la Charité; for Huguier, at Hopital Beaujon; Verneuil, at St. Louis; Demarquay, at Maison du Bois; Logier, at Hotel Dieu; Richard, at Cochin; Gosselin, at St. Antoine; Nélaton, at Hopital des Cliniques, and for others in private practice. The greatest interest was manifested by every one in his operations, as they were the first of the kind that were ever successful in Paris. Since then, his operation for vesico-vaginal fistula is performed with success not only in Paris, but throughout all France. For this work, upon the recommendation of Baron Larrey, Nélaton, Trousseau, Sir Joseph Olliffe, Dr.

Johnston and Mr. Dayton, then Minister to France from the United States, the French Government conferred on Dr. Sims the order of Knight of the Legion of Honor.

While in Paris he was invited by Prof. Déroutbaix, surgeon to the King of Belgium, to go to Brussels and demonstrate his peculiar operations there. He did so, spending a whole day in the St. John's Hospital, performing several operations, since which these operations have been performed there by Déroutbaix and others as successfully as in the Woman's Hospital of New York. For this he was elected Corresponding Fellow of the Imperial Academy of Medicine of Brussels, and the Belgian Government offered him the Order of Leopold the First, but the then American Minister at the Belgian court (Mr. Sanford) objected to his receiving it on the ground that Dr. Sims was a Southerner. This was in 1862, during our great civil war, and Dr. Sims did not receive the Belgian Order.

He has been decorated by the Spanish and Portuguese Governments, and twice by the Italian. Prof. Botta, of New York, aided the American Minister, His Excellency, Hon. George P. Marsh, in pressing his claims to this honor upon the Italian Government.

Besides these honors from various Governments, Dr. Sims has received the highest recognition of his labors from many learned societies, both at home and abroad. He is honorary member of learned societies in London, Edinburgh, Brussels, Berlin, Christiania, &c. At home, he is honorary member of the State Medical Societies of New York, Connecticut, Virginia, South Carolina, Alabama, &c. At the meeting of the American Medical Association, in Louisville, 1875, he was elected President, and delivered the Centennial Annual Address before the Association at Philadelphia, June 6, 1876.

The Presidency of the American Medical Association is the highest honor that any medical man can achieve in this country.

In July, 1862, Dr. Sims went to Europe again with his family. He intended to leave them there for three or four years for educational purposes, and to return to New York the following November. But the work done by him at his first visit (1861) in the hospitals of Paris and Brussels, and in private practice, had given him such a reputation that he was immediately fully em-

ployed; and this decided him to remain in Paris longer than he intended.

While abroad, Dr. Thomas Addis Emmet, who had been Dr. Sims' assistant in the Woman's Hospital for seven years, was promoted to be surgeon-in-chief. He thus had the management of the Hospital at the most trying period of its existence; and we cannot give him too much credit for the prudence and courage he displayed in carrying it safely through the difficulties by which, for a time, it was surrounded.

It cannot be denied that the Woman's Hospital, from the outset had many opponents in the profession in New York, and that its friends were obliged to exercise the utmost vigilance to protect it against insidious assaults. In 1863, a resolution was introduced in the Common Council of the city of New York to reclaim the land granted to the Woman's Hospital on the pretext that the Board of Governors had failed to comply with the terms upon which the grant was made; whereupon, the Hon. James W. Beekman, President, with other members of the Board of Governors, invited Mayor Hoffman and some members of the Common Council to visit the site of the Hospital, where it was proven to their satisfaction that the charge was baseless, and thus this nefarious scheme for destroying the Woman's Hospital was crushed.

In 1868, Dr. Sims returned to New York, taking up his residence permanently, but leaving his family in Paris two years longer to complete the education of his younger children.

In 1870, he was in Paris on a visit to his family, when the Franco-Prussian war commenced. Immediately all Paris was alive to the necessity of organizing ambulances to go to the front. The American Colony in Paris entered heartily into the prevailing spirit, and decided to organize an ambulance corps. To this end a committee was appointed to raise funds and fit out an ambulance. The committee called on Dr. Sims, and requested him to take command of it, as surgeon-in-chief, with full power to appoint his subordinates. He at first refused on account of his age and professional obligations to return home at an early day. Mrs. Sims was present at the interview with the committee, and she urged her husband to accept the appointment, saying "it was a fitting occasion to repay in some sort the obligation we all

feel for the generous hospitality we have received from the French people and government." Whereupon, Dr. Sims accepted the appointment, and in a few days his Ambulance Corps was organized and ready for work. The young men composing it were anxious to go to the front, where they felt they were most needed. The committee opposed it. Dissatisfaction and dissension arose, and Dr. Sims and his staff resigned, and organized themselves into the "Anglo-American Ambulance Corps," composed of eight Americans and eight Englishmen—Dr. Sims being surgeon-in-chief, Dr. Wm. MacCormac, First Assistant, Dr. Frank, Second, and Dr. Thos. T. Pratt, Third Assistant. This was on the 27th Aug. They went immediately to the headquarters of the Société de Secours aux blessés, and offered their services to Dr. Chénée, the superintendent. They were promptly accepted, and Dr. Chénée furnished them with horses, wagons, tents, medicines, instruments, surgical appliances, money, indeed everything necessary for a complete outfit, and on the next day they left Paris (28th August, 1870), marching from the Palais de l'Industrie, in the Champs Elysees, to the railroad depot, le Nord, a distance of about five miles. Paris had already sent out ten French Ambulances. In marching to the depot, it was customary for the young men of the ambulances to take up collections for the sick and wounded from the immense crowds that lined the way. The sum usually collected varied from six to seven thousand francs for each ambulance. When the Anglo-American Ambulance started out, it was preceded by the English, French and American flags borne by ladies—the French and American by daughters of Dr. Sims, and the English by Mrs. Ward, the mother of the great tragedienne, Miss Genevieve Ward. The march was a grand ovation. Hundreds of thousands of the citizens of Paris thronged the Boulevards through which they passed, cheering and manifesting every possible expression of enthusiasm and satisfaction. "*Vive l'Amerique*," "*Vive l'Angleterre*," "*Vive la France*," was shouted by the dense mass of spectators for the whole distance, and under the excitement produced by the three flags borne by three ladies, at the head of an International Ambulance, the young men of the Ambulance collected, as they marched, more than twenty thousand francs—three times as much as were collected at any time before.

Dr. Sims, with his Ambulance, passed through Belgium to Mézieres, which no French Ambulance could have done. There he heard that a battle had been fought the day before in the neighborhood of Sedan. He pushed on to Sedan, not knowing it was the headquarters of the Emperor and Marshal McMahon. He arrived just as the great battle commenced, August 31st, 1870. The military train, upon which he entered the city, received almost the first fire of the Prussians, and the bridge over the Meuse was blown up an hour after the train passed safely over.

On his arrival at 10 A. M., he reported to the Mayor, and his Ambulance, which was the first to reach Sedan, was assigned to the Cazerne d'Asfeldt, which contained nearly 400 beds; and at 11 o'clock they began to receive the wounded from the battle field.

On the night of the first day's battle Dr. Sims, Dr. McCormac, Dr. Frank, Dr. Pratt, Harry Sims, and some others of his corps, went out on the battle field, between Balan and Bazielles, and assisted in collecting the wounded and transferring them to adjacent cottages. Dr. McCormac and Dr. Frank were busy all night in performing operations, and otherwise attending to the wounded.

Dr. Frank was specially detailed to take charge of the branch ambulances thus established, and was left at Balan with two or three assistants. The great battle was fought on the next day, September 1st, and Dr. Frank occupied the Mayory as a Hospital, which was between the two contending armies, and subjected all day to a terrific cross fire. The Mayory, with the buildings near it, was riddled with shot and shell. Dr. Frank fortunately escaped unhurt, but was, with his assistants and the wounded, with nothing to eat or drink, obliged to lie on the floor, all day long, to avoid the shot that poured through the windows.

Dr. Frank, in the Balan branch of the Anglo-American Ambulance, treated about a thousand German wounded, and did his work most efficiently. In the Cazerne d'Asfeldt were treated about sixteen hundred, mostly French.

Thus it will be seen that the Anglo-American Ambulance rendered essential service to the wounded of both armies.

At 6 o'clock on the morning of the 1st September, as Marshal McMahon was in the act of mounting his horse, on the battle field, about four miles east of Sedan, he was wounded by the fragment of a shell, and was carried on a litter to his headquarters in the city. The wound was serious and painful, but not dangerous, and in a few days he was removed to a village on the borders of Belgium. Dr. Sims formed a part of his escort, and so pleased was the Marshal with this attention, that he presented him with a thousand francs, to purchase delicacies for the sick and wounded in his Ambulance.

Dr. Sims remained at Sedan about a month, the work of his Ambulance being then finished, Dr. Sims, Dr. McCormac, and Dr. Frank resigned and returned to their respective homes.

Dr. Thos. T. Pratt, of Alabama, now of Paris, son-in-law of Dr. Sims, was then elected Surgeon-in-Chief of the Anglo-American Ambulance, and went with it to Tours and Orleans, remaining there till peace was declared, rendering the greatest service to the sick and wounded of both armies. For this he was created Knight of the Legion of Honor by the French government, and received the Iron Cross and other decorations from the German government.

Dr. Sims was the oldest man (57) who left Paris in charge of an Ambulance. The older French Surgeons, such men as Riccord, Nélaton, Demarquay, and others, remained in Paris, in charge of Ambulances there. While in Germany, the oldest and most distinguished Surgeons took the field.

Dr. Sims' first assistant, Prof. Wm. McCormac, Surgeon to St. Thomas's Hospital, London, has rendered great service to military surgery by his carefully prepared record of the work done by the Anglo-American Ambulance, which was published in London, 1870, and has been translated into several languages.

As an author Dr. Sims has produced papers on Trismus Nascentium, Silver Sutures in Surgery, Clinical Notes on Uterine Surgery, Treatise on Ovariectomy, Intra-Uterine Fibroid Tumors, the Microscope in the Sterile Condition, a History of the Discovery of Anæsthesia, and his great Centennial Address, delivered before the American Medical Association in Philadelphia, June 6th, 1876, with some minor contributions, but what he has written will find place in professional libraries long after

more voluminous and pretentious authors will have been forgotten. While in Europe his practice was large, and embraced many cases in the highest walks of life, placed in his hands by leading surgeons, who thus recognized his admirable skill and the originality and merit of his discoveries. He was everywhere received with the greatest kindness by leading men in the profession; and in Paris he had the confidence of such men as Baron Larrey, Velpeau, Ricord, Nélaton, Civiale, Sir Joseph Oliffe, Demarquay, Chassaignac, Trousseau and others.

Dr. Sims is distinguished for a wonderful personal magnetism and a geniality of manner which win confidence and regard from all who meet him. He is a born leader and teacher. Our medical art has progressed, and will continue to progress, as a result of his labors. By his clearness of vision and remarkable foresight he is enabled to point out the true pathway of a wise and inevitable progress, ethical as well as surgical. His moral courage is unexcelled, and having defined convictions, he has the fortitude and the ability to assert and maintain them, however unpopular for the time they may be. His views in regard to the "Code of Ethics," as expressed in his late Annual Address, are manly, and represent the best intelligence and sentiment of the medical profession. They are wholly antagonistic to all the wily ways of sham and pretension; and they inaugurate a movement which must eventuate in a larger liberality, a higher sense of honor, and in untrammelled honesty among medical men.

The following opinions in regard to the importance and value of Dr. Sims' discoveries and labors fully justify all that is claimed for him.

Dr. John W. Francis, in his address in 1856, on the first anniversary of the Woman's Hospital, said: "The particular class of diseases to which the Woman's Hospital is devoted has now for the first time a practical recognition of its claims. Prior to the discovery of Dr. Sims, surgery could do nothing for this formidable class of affections. It was reserved for an American to make a discovery in our medical art which already ranks among the greatest of the 19th century, marking an era in our country, from its being made the basis of a Woman's Hospital, auspicious of the most important results in clinical science. Judging from the present aspect of affairs, I think I see in the future

that great renown must await the penetrating genius and consummate investigations of Dr. Sims in his high vocation. This first anniversary of the Woman's Hospital is a momentous occasion and pregnant with great results."

Dr. Valentine Mott followed and said: "A few days after his arrival, I called on Dr. Sims and learned that he was to make his residence with us. At that time I had a lady under my care who had applied to me to perform an operation which Dr. Sims has so signally perfected. Believing that he could perform the operation more successfully than I, and being anxious also to learn the steps by which he performed it, and of which I had read, I gave the patient to him, with the request that he should treat the case, which was a complicated one. The operation was performed in my presence, and was a complete success. During my late visit to France and England, I took great interest in the performance of this operation, and was present when eight cases were operated upon—seven by Jobert and one by Roux, two of the most eminent surgeons in Europe—and all of them failed. I was anxious, therefore, to learn the steps of this operation, as performed by our countryman, Sims. His may be said to be a *new mode* of operation. I am aware that some of our profession who have become familiar with the operation since the introduction of it by Dr. Sims, have not felt that they were so much indebted to him as I feel that I am for the sake of humanity. Dr. Sims is *entitled to all the credit and all the honor of originality*, and I say *palmam qui meruit, ferat*. Go on, Dr. Sims, in your work of charity and benevolence! Although no marble urn or inanimate bust may tell of your honor and renown, you will yet have, in all coming time a more enduring monument; and that monument will be the gratitude of woman."

Dr. A. H. Stevens next said: "The establishment of the Woman's Hospital is an honor to science. It shows that its votaries know how to appreciate services rendered to humanity. It is an honor to the State; and I doubt not the State will consider it such, and take it under its patronage. When we consider that the operation in which Dr. Sims has so happily succeeded has exercised the best minds in the medical profession for many centuries, and that success, in any measurable degree, is now, for the first time attained, we can imagine the meed of praise which is due to him. Indeed, I know of no discovery that is likely to be so largely beneficial to humanity, and which has originated among us, with the single exception of the employment of anæsthetics in surgical operations, as this very one that has led to the foundation of the Woman's Hospital."

Dr. Sims is now the only surviving member of the first Board of Physicians and Surgeons of the Woman's Hospital—Francis, Mott, Stevens, Delafield and Green all resting in honored graves.

Dr. Sims' inventions and discoveries have created a new era in medicine, and throughout the world he is recognized as the father of gynæcology, which is now a distinct department in every well-organized medical college.

It will be seen that at the very outset of his career in New York, he was able to draw to himself personally the friendship and co-operation of the most eminent members of the medical profession, the fathers and founders of the schools, together with that diviner support which woman alone can give, to aid such a benevolent enterprise as the founding of the Woman's Hospital has proved itself to be. The same high qualities of head and heart which enabled Dr. Sims to achieve such remarkable results at home, also enabled him to win a more distinguished recognition abroad.

On the 21st December, 1836, Dr. Sims was married to Eliza Theresa, daughter of Dr. Bartlett Jones, of Lancaster, South Carolina. To them were born nine children—five daughters and four sons. Two sons are dead. The survivors are all grown.

ART. II.—*Spasm of the Œsophagus.* By ANDREW H. SMITH, M. D., New York, Surgeon to the Throat Department of the Manhattan Hospital; Physician to St. Luke's Hospital, etc. (Read before the New York Medical Union, Oct. 21st, 1876.)

Spasmodic stricture, or spasm of the œsophagus, is characterized by obstruction in swallowing without an apparent anatomical lesion. This affection, though not very infrequent, seems to have attracted but little attention from the profession, and it is remarkable how seldom it is referred to in our periodical literature. Braithwaite, during nine years, does not mention a single case; nor does it fare much better in our standard works. Cohen, in his book of more than 500 pages on *Diseases of the Throat*, discusses it with half a page. Aitken, Flint and Trousseau do not mention it at all. Neimeyer gives it half a page. Though

it is *par excellence* a nervous disease, Hammond, in his ponderous volume on *Diseases of the Nervous System*, overlooks it entirely. Yet, though but seldom attended with danger to life, it is an affection most distressing to the patient, and sometimes most rebellious to treatment. The disease occurs much more frequently in females than in males, and is very apt to be associated with the hysterical temperament.

The *clinical features* vary greatly in different cases. As a general rule, the accession is somewhat sudden. Without any previous warning, the patient finds that he can swallow only with difficulty, or perhaps not at all. The bolus of food is suddenly arrested, usually just as it is passing into the œsophagus, and either he is obliged to remove it with his fingers, or it is forced by a convulsive effort back into the mouth. When the latter is the case, the spasm may be of some little duration, and so severe as to produce a good deal of pain. This pain may be felt at the actual seat of the stricture, or it may be referred to a point between the scapulæ. When this spasm occurs for the first time, the patient is apt to be excessively alarmed, imagining that he is about to strangle to death.

In other cases, the disease approaches gradually, the patient noticing at first that crumbs of bread or other small bits of dry food are apt to stick in his throat. Liquids are generally swallowed with comparative ease, even when solids refuse entirely to pass the obstruction, but the inability to swallow may be absolute, including liquids as well as solids. Sometimes the difficulty remains persistently; at others it comes and goes—being especially liable to occur when the patient is fatigued or excited, or in women at the time of the menstrual flow.

The disease is sometimes of very short duration; in other cases it persists for months or years, in spite of the most careful and intelligent treatment. A few cases have been recorded that have resulted fatally, but rather from fever complications than from the affection itself, since patients can always be kept from starvation by the use of the stomach tube.

As to the *pathology* of the affection, we can only infer that it consists in a perversion of the normal reflex action of the œsophagus. In normal deglutition, the contact of the bolus with the mucous surface of the gullet produces an impression

which is reflected to the muscular coat at a point *above* the mass which is being swallowed, and thus the resulting wave of contraction follows immediately after the bolus and forces it downward. But in spasm of the œsophagus it would seem that the excitation is reflected to a point *below* instead of above the bolus, so that the resulting contraction presents an effectual obstacle to the passage of the alimentary mass, or even forces it upward. Now an analogous reversed action takes place physiologically in vomiting and eructation, in which matters are forced upward instead of downward—showing that there is a provision of nature by which the reflex impulse may be switched off, so to speak, from one set of fibres above to another set below the point where the impression is made. The abnormality, therefore, in spasm consists simply in what we might call a misplaced switch, but the manner in which the derangement takes place, like many other problems relating to reflex action, has not been determined. It would seem, however, that the irritation which produces the spasm may have its seat in a *neighboring* organ and not in the œsophagus, as in a case mentioned by Watson, in which the spasm was caused by ulceration of the larynx, and ceased when the ulcer healed. In very many cases there is an obvious connection between the spasm and uterine disturbance, or some other source of nervous perturbation, and it is then apt to be associated with hysteria.

In regard to the *diagnosis*, if the case came on suddenly and reached at once a point which rendered swallowing decidedly difficult, the lodgment of a foreign body being excluded, or if the condition is intermittent, being produced or aggravated by fatigue or excitement, there can be no doubt of its spasmodic character: But when the affection comes on gradually and progresses steadily, it must be differentiated from the following conditions: Paralysis of the pharynx or œsophagus, imperfect closure of the glottis in swallowing, pressure from tumors or enlarged glands, organic stricture.

Paralysis of the constrictors of the pharynx or of the muscular coat of the œsophagus, will render deglutition difficult or impossible, and from the statements of the patient alone might lead to the suspicion of stricture of the œsophagus. But paralysis of the pharynx is at once made evident by the absence or

impairment of reflex action when the finger is introduced into the fauces; and a like condition of the œsophagus is immediately detected by passing a bougie.

Imperfect closure of the glottis, either from paralysis or as the result of ulcerative action may cause dysphasia from the entrance of the food or drink into the larynx. But in this case the principal difficulty will be in the deglutition of fluids, while solids occasion the chief trouble in stricture. Moreover, there will be hoarseness, and the whole group of symptoms will point rather to the larynx than to the œsophagus; and lastly, a laryngoscopic examination will show the exact nature of the affection.

Tumors of various kinds may press upon the œsophagus and cause dysphagia. If located in the neck, they can usually be detected by palpation, but if situated within the chest, we may have to rely upon the symptoms for a diagnosis. The co-existence of alteration of the voice, especially if the laryngoscope shows it to be owing to paralysis of one or more of the muscles of the larynx, is strong presumptive evidence of a growth pressing upon the recurrent laryngeal nerve, as well as upon the œsophagus. If the paralysis be on the left side, the chances will be immensely in favor of an aneurism of the arch of the aorta at the point where the left recurrent nerve loops round that vessel.

Dulness on percussion in the interscapular region, associated with dysphagia, points to pressure from enlargement of the bronchial glands, especially in young persons with a scrofulous history. The passage of a bougie will not be likely to aid us in distinguishing this condition from spasmodic stricture, since it rarely happens that growths outside of the tube surround it so completely as to arrest the instrument. If the obstacle exist only on one side, the loose attachments of the œsophagus will permit the latter to be deflected, so that gentle pressure will cause the instrument to pass, giving to the hand precisely the same impression as a spasmodic stricture.

There are three forms of organic stricture which have to be distinguished from spasm. These are the traumatic, the syphilitic, and the cancerous. The traumatic, which results from wounds or from swallowing scalding or corrosive fluids, will be at once excluded by the history of the case. Syphilitic stric-

ture, which is a rare disease, will always have been preceded by other syphilitic manifestations, or if a trustworthy history cannot be obtained, there will generally remain traces of past or present infection of the system. As it is one of the later manifestations of syphilis, the chances of its existence will be less in proportion to the youth of the patient.

Cancer of the œsophagus always comes on gradually, and is rarely seen in persons under 30, or even 40, years of age. It is usually, but not always, accompanied by an abundant secretion of frothy mucus in the throat, which keeps the patient constantly hawking and spitting. Pain is seldom severe, but when the stricture is so located as to be accessible to palpation, a certain amount of tenderness can generally be elicited by pressure. Exploration of the stricture with a small bougie will discover in most cases an irregular surface and an unnatural hardness, giving to the parts a knobby feel. As the cancer is, eight times out of ten, of the epithelial variety, secondary deposits in the neighboring glands are frequently absent. The recurrent laryngeal nerves are very apt to become involved in the diseased action, giving rise to paralysis of the vocal cords.

In all forms of organic stricture, the bougie will aid greatly in the diagnosis, for here the stricture will not yield to gentle pressure with a full-sized instrument, as it will in a case of spasm. It may be well to remark, however, that nearly every organic stricture which is in the least degree irritable is probably complicated with a greater or less degree of spasm. It is only in this way that we can account for the relief to swallowing experienced from simply pressing upon the stricture for a few moments with a bougie which does not enter it at all, and also for the fact that tepid liquids will pass such a stricture much more easily than those which are either hot or cold.

The treatment of spasm of the œsophagus is both general and local. If, as is generally the case, the nervous system is rendered irritable by defective nutrition, generous diet, exercise in the open air, bathing and tonics will be indicated. Any discoverable drain upon the strength should be removed if possible. Watson relates a case treated by Sir Benj. Brodie:

“A lady consulted him unable to swallow the smallest morsel of solid food, and swallowing liquids not without the greatest

difficulty. The symptoms had been coming on upwards of three years. A full-sized bougie being introduced, entered the stomach without meeting the slightest impediment. This lady's face was pale and bleached; her feet were œdematous. She had long labored under internal piles, from which repeated discharges of blood had taken place. Under the use of remedies which relieved the piles and the bleeding, the difficulty of swallowing went away."

In addition to tonic measures, the direct antispasmodics may be tried, especially the bromides. Strychnia has been sometimes useful, but if the diagnosis were correct, it could act beneficially only as a general tonic. When the spasm is merely a manifestation of hysteria, the treatment proper to that condition should be employed, including all the moral influence which the physician can command.

Locally, the indication is to render the mucous surface less impenetrable. The best means to secure this end is the frequent passage of a bougie as large as can readily be got through the stricture. To accomplish this, especially in children, it may be necessary at first to give an anæsthetic. A form of bougie devised by myself, and which is adapted for leaving several minutes *in situ*, is described in connection with a case which I published in the *Monthly* for October, 1874, and to which the reader is referred. In some obstinate cases, benefit is derived from covering the bulb of the bougie with sponge, connected with a wire passing through the handle of the instrument, and by this means passing a current of electricity through the parts at the seat of the stricture. By the aid of a gum elastic catheter such an electrode may be easily extemporized.

Stimulating applications, such as nitrate of silver, tincture of iodine, etc., applied with a probang, will sometimes be successful. Inunctions of belladonna on the front of the neck, or local hypodermic injections of atropia, may be tried in obstinate cases.

The following cases which have occurred in my practice during the past two years, together with the one referred to above, will serve to illustrate the more prominent features of the disease in question:

CASE I.—W. M., a farmer from Connecticut, aged 30, was referred to me by Dr. Agnew in February last, for a difficulty in swallowing. He had been "subject to quinsy," and had

once suffered from diphtheria. Since his 15th year, he had not eaten meat, except in the form of hash. In the spring of 1874, his swallowing grew rapidly worse, and he was obliged to use liquids only. A physician in Hartford advised the use of electricity, which was of some service, but still he was unable to get down anything more solid than mush and milk. There is no history of syphilis, and no hereditary tendency to cancer. Has never swallowed anything scalding or corrosive, and deglutition is not attended by pain. A bougie three-quarters of an inch in diameter is arrested at a point just above the top of the sternum, but a gentle force, continued for a few seconds, causes the instrument to pass the obstruction. The bougie was carried up and down past the stricture several times in succession, and the swallowing seemed very much improved for the time. An instrument was procured for him, which was to be passed every second or third day by his physician.

I did not see him again until about the 1st of November, when he called to say that he had improved considerably, although the instrument had been used very irregularly, *and was never carried through the stricture*, being merely pressed upon its upper surface. He stated that for a short time in the morning he was able to swallow solid food, but that he lost the power to do so as the day wore on. He also mentioned that he had had a few days before an "hysterical attack," during which he lay for an hour in a nearly unconscious condition. Once before, when he was about 16 years of age, he had a similar attack. This feature of the case, together with the fact of his being able to swallow better in the morning before he became fatigued by his work, to which he seems physically but ill adapted, illustrates the defective condition of the nervous system, which usually accompanies the disease.

CASE II.—Peter Dolan, a lad, aged 15, applied at the Manhattan Hospital August 6, 1876, stating that two or three days before, while swallowing a cup of tea, he had felt something stick in his throat, and since then he has had pain and difficulty in swallowing, alleging that something rises in his throat and shuts it up whenever he attempts to swallow—being sometimes, however, much worse than at others. There is no tenderness of the throat upon pressure, but he says that there is a good deal of pain when he attempts deglutition. He is very much agitated and alarmed, fearing that he will choke to death; and his mental condition evidently aggravates greatly his physical difficulty. He is pale and thin, and apparently insufficiently nourished, probably the result of actual destitution. A bougie three-eighths of an inch in diameter encountered an obstruction

a short distance below the level of the cricoid cartilage, but the obstruction was easily overcome by very gentle, continuous pressure. The patient, however, refused to permit a second introduction of the instrument. A blister was applied to the throat, and large doses of bromide of potassium were administered, with tonics, and his father, getting employment about that time, secured for him better nourishment. His apprehensions were quieted by constant assurances that there was no danger. He was soon able to swallow fluids without much difficulty, and he continued to improve until, when I saw him about the 1st of October, he could take any kind of food as a rule, though solids occasionally produced a spasm so severe as to cause considerable pain.

CASE III.—Mrs. T., aged 32, married, applied to me Oct. 1, 1876. From her childhood she had been troubled with frequent micturition—being obliged sometimes to empty the bladder as often as every hour, or even more frequently. For several years past she has suffered from displacement of the uterus, and from profuse menstruation. She has been married four years, and has had one living child and one miscarriage. Two years ago, she first observed a difficulty in swallowing solid food, which has continued to the present time. It is especially troublesome when she is tired or a little excited, and more particularly at the menstrual epochs; and this is the case also with the frequency of micturition. She would not permit the use of the bougie, but the points of the case were so well marked that the diagnosis could be readily made without it. The uterine symptoms not being prominent at this time, effort was directed to improving the general health, and thus fortifying the nervous system. As she was anæmic, and digestion was slow and imperfect, a powder, composed of carbonate of iron, pepsin and rhubarb, was given, and bathing and exercise were enjoined. The case is still under treatment, but she has improved greatly in every respect. She can now, as a rule, eat solid food without difficulty, and micturition is much less frequent.

The following case, reported by Dr. McKibben, of Pennsylvania, in the *American Journal of Medical Sciences* for October, 1859, illustrates an extreme phase of spasm of the œsophagus, probably dependent upon some grave lesion of the nervous centres:

The patient, a delicately-built man, aged 24 years; previously in excellent health. On the evening of October 24th, after partaking sparingly of supper, he found himself unable to swallow the smallest particle of any solid or liquid substance. The doc-

tor was called on the 27th. Found no pain, sickness of stomach, or difficulty of breathing. but great weakness, constant, intense thirst and desire for food, with sleeplessness. Voice as in cyanche tonsillaris—of which, however, inspection showed no sign. He would seize a glass of water, make a powerful effort to swallow, retain some in his mouth, and try vainly with all his strength to urge a single drop into his gullet. A stomach tube passed readily, proving no stricture to exist, and whey, beef tea, etc., were injected with some temporary benefit. Blisters to the throat, stimulating liniments to the spine, injection into the stomach of brandy nutriment, etc., proved abortive, from an apparently total lack of nerve force, and the patient died on the 29th. No autopsy.

ART. III.—*The Value of Sneezing in the Reduction of Hernia.*
By CHARLES DENISON, M. D., Denver, Colorado.

As I am not aware that the procedure of giving snuff, while an attempt at reduction of hernia by taxis is being made, has been known to the profession, I wish to report two instances which have lately occurred in my practice:

May 30. I was called out at night to see a Chicago gentleman, temporarily sojourning at the Evergreen House in Morrison. I reached him about half past four next morning, having to go *via* Mt. Vernon, around the "Hogbacks," or outside foot hills of the Rocky Mountains. I found Dr. J. C. Dunham in charge, from whom I heard that Mr. C. had the previous evening caused the hernia while helping a lady to alight from a carriage; that he had had the difficulty for several years, during which time he had worn a truss, and had two or three times suffered from its strangulation, due to his negligence in leaving off the truss. It was oblique, inguinal hernia, and this time the protrusion was sufficient to cause the right side of the scrotum to assume the size of a man's fist. Dr. Dunham had used sufficient taxis, and failed to reduce the hernia. The pain being considerable, he had given the night before morphia subcutaneously, and changed the local applications from cold to hot.

I found the tumor very tense, and I withheld much manipulation, thinking it was useless to attempt reduction under the existing circumstances. We applied ice locally, and elevated the foot of the bed on a table. Later, at 8½ o'clock in the morning, when the parts were chilled by the ice, and hence less sensitive, taxis was tried, but it was evidently useless.

The idea had occurred to me before of making such a patient sneeze, while firm and well directed pressure on the hernia was being made, and I cast about to try the experiment; but no snuff could be found in the place. Finally, toward noon, some patent "catarrh snuff" was procured, which was used. While I had firm hold of the tumor, during the first good sneeze, I felt a little of the contents slip back into the abdominal cavity. The sneezing was kept up, and at times we could hear a little of the air in the protrusion shoot through the internal ring. This happened at the end of the sneeze. I cannot explain it better than by saying there seems to be a billowy movement of the anterior wall of the abdominal cavity, from above downwards, which is suddenly reversed. This reversed action is accompanied by a sudden relaxation, as it were, at which instant a little of the contents of the hernial sac shoots back through the intestinal ring. The pressure was continued for over an hour—the omentum (for it was an entero-epiplocele), which undoubtedly caused the strangulation, being the last to disappear.

The other day, a gentleman was referred to me, at my office, who had a right oblique inguinal hernia, which I considered an epiplocele—the omentum only being strangulated. I failed at first in reduction by taxis, and left him in my office with ice on the tumor and his heels up in the air. After an hour, I returned with some Scotch snuff. I made him sneeze so long as there was any response in his Schneiderian membrane, meanwhile using diligent taxis. The tumor receded with more difficulty than I think an enterocele would under the same procedure, but finally it was all gone.

Whether the peculiar relaxation of the abdominal wall or the pulling within on the intestine or omentum during the sneeze does the good, or both combined, I cannot positively state, though I am inclined to the latter view. So far, however, I am very well pleased with my discovery, as I considered it; and I give it to the profession with the hope that, as a simple procedure, it may save many an unfortunate from the danger and suffering of a surgical operation.

P. S.—Since writing the above, I have been informed by Dr. S. D. Bowker, of Sunshine, Colorado, that Dr. Taylor, of Kansas city, suggested this snuff experiment to him some ten years ago. As the recent surgical authorities I have consulted do not mention it, and several physicians, including Prof. John T. Metcalfe, of New York, who was lately visiting our city, in-

formed me they had never heard of it, I came to the conclusion it was a new idea.

Dr. Bowker states that once while using taxis, in a case of direct inguinal hernia in a female, his patient sneezed, in consequence of the window being thrown open and a gust of air suddenly striking her, when the protrusion as suddenly disappeared.

ART. IV.—*How to Cure a Bad Cold.* R. G. WHARTON, M.D.
Port Gibson, Miss.

At this season of the year, when colds are so prevalent, I wish to suggest a remedy which I have been using for a few years with good success. We all know the discomfort and positive suffering that is produced by a bad cold; yet, notwithstanding this almost universal experience, our distress from this disorder, instead of exciting the sympathy, too often only provokes the mirth of friends. But, in reality, a bad cold often becomes a serious matter when neglected. It may be the precursor of pneumonia, and, in bad constitutions, may lay the foundation, and in fact be the initial stage of phthisis; the effused product of catarrhal inflammation refusing to be absorbed, and thus causing the destruction of lung tissue. Besides the danger from lung disease, there is that also of chronic inflammation of the mucous surfaces of the pharynx and of the naso-pharyngeal space, with the extension to the Eustachian tubes, causing inflammation of the middle ear, with proliferation and subsequent sclerosis of its connective tissue cells. Chronic inflammation of the nasal mucous surfaces also is perhaps one of the most common results of neglected colds, and one of the most disagreeable. The host of patent medicines which are advertised all over the land for the cure of chronic catarrh and ozæna, attest but too well the universal prevalence of this disease; yet many persons are suffering from it without being aware that it is a disease. They suppose that they have taken a fresh cold, or that they are peculiarly liable to take cold—as they feel an aggravation of their symptoms on every change of the weather, or on every exposure to dust. While in reality there is a chronic in-

flammation of the mucous surfaces of the nasal cavities, which will last for a life time, unless properly treated.

Now for the remedy for colds: It is carbonate of ammonia in full and often repeated doses. The established value of this medicine in pneumonia naturally suggested its employment in the catarrhal affections of the lungs and contiguous mucous surfaces. To be effective, it should be given in larger doses than are usually prescribed. I have been in the habit of giving ten grains in mucilage every hour or two hours for one or two days in severe cases. With proper attention to other hygienic means, the patient will soon recover from the severest cold. He is not so liable to relapse as he will be after a course of sweating medicines, which leave the system sensitive to every change of temperature.

The ammonia seems to effect a direct resolution of the congestion of the mucous surfaces. It is considered to be a stimulating expectorant; and so it is, no doubt. But it almost always breaks up a cold without causing any expectoration. The sense of fulness and constriction of the chest, the tickling cough, and all other disagreeable sensations, often leave the patient in a very short time, and he finds himself perfectly cured, and in excellent condition.

Clinical Reports.

Acute Rheumatism—Clinical Report of a Case. HUME FIELD,
M. D., San Marino, Dinwiddie county, Va.*

Acute rheumatism is generally conceded to be a peculiar inflammatory affection, liable to attack any of the tissues of the body—fibrous, muscular, serous, &c.—differing from ordinary inflammation on account of its metastatic nature or property. While some pathologists attribute the cause of the disease to perverted nutrition from abnormal nervous influence, the weight of the profession considers it a specific blood poison, due to an excess of lactic or some other acid. To this latter opinion I am

*This paper was read during the session of the Medical Society of Virginia at Charlottesville, was referred to the Publishing Committee, by whose vote it was referred back to the author, with the suggestion that it be published in some medical journal of his selection. Dr. Field has kindly contributed the paper to the *Monthly*.—ED.

inclined. The rheumatic diathesis is the strongest predisposing cause, which element in the constitution is hereditary. The duration of rheumatism is very uncertain, and the treatment in many cases is equally unsatisfactory, according to my experience and observation, notwithstanding the contrary opinion of many eminent physicians, who essay to relieve cases of acute rheumatism in from one to two weeks by the alkaline, lemon-juice or other treatment. In many instances, my experience has coincided with that of some very distinguished practitioners at home and abroad, namely: that the "expectant treatment has proved as efficacious in curing the malady or warding off heart complications as any other."

Without claiming any originality or novelty for these views, I simply offer them in these hasty and imperfect notes as preliminary and introductory to the following interesting case of acute rheumatism, and trust it may serve as "food for reflection" to such an extent, at least, as to lead to the solution of the question, Why, in this case, did the inflammation prove so slightly amenable to treatment, so very persistent, and of such long continuance? Dr. W. B. Gray, now of Richmond, reports a similar case in the *Transactions of the Medical Society of Virginia*, for 1871, but he does not state the termination of the case:

February 1, 1873, called to visit Master E. McK., æt. 15, in consultation with Dr. Davis. The history and treatment of the case, as related by the Doctor, were as follows: Before his attack, the patient was hale, hearty and healthy. About three months ago he was summoned to his bedside, and found him suffering with a violent attack of acute rheumatic fever, with inflammation of most of the larger joints and limbs, which were red, swollen and intensely painful. Heart sounds clear; skin hot, with perspiration of acid smell; pulse 130, but strength good; tongue thickly furred; bowels costive; urine scanty, turbid and acid; stomach retentive, with considerable thirst. Prescribed colocynth and calomel pill, to be followed in four hours with full and free doses of salines, alkalies, &c. Anodynes to relieve exquisite pain. Limbs rubbed with liniment and enveloped in cotton batting. Diet confined to liquids. This treatment continued for four weeks, with some amelioration of symptoms, when it was alternated with citric acid, quinia, colchicum, &c., for four weeks more, and then alternated with alkalies, combined with iron and bark. In the meantime, endocarditis super-

vened, which, though proving quite alarming for a short time, soon disappeared without much further trouble, and the disease became fixed, as it were, in inflammation of the periosteum of left humerus, about the insertion of the deltoid muscle, middle of left sixth rib, lower third of shaft of left tibia, and left ankle joint, resulting in phlegmonous abscesses. These, on being opened, discharged large quantities of pus—particularly the abscess over the tibia, which continued to discharge the same from caries and necrosis of the bones, as revealed by probing, up to the period when I saw him.

Notwithstanding the efficient and skillful treatment *ab initio ad finem*, the case now presented many of the symptoms of pyæmia, such as extreme emaciation, great debility, hectic fever, complete anorexia, &c. It was determined to give the most liberal supporting treatment, not neglecting to combine such rheumatic remedies as the stomach would tolerate, in the hope that his system might be so far built up as to justify surgical interference, at least in respect to the tibia and ankle joint. Under this treatment, the patient rallied and improved, hectic subsided, appetite returned, strength increased, some flesh regained.

March 14, 1873, I visited the case with Drs. Davis, (Rev.) E. B. Jones, and the late Dr. H. C. Worsham, and upon consultation, it was unanimously decided to amputate the limb. After etherizing the patient, and with the assistance of these gentlemen, the operation was successfully performed four inches below the knee, which the lad stood remarkably well. Dissection revealed extensive necrosis of tibia, caries of tarsal bones—completely justifying the amputation. Relieved of this source of exhaustion and irritation, the patient improved more rapidly, under the skillful treatment of the attending physician, Dr. Davis, and in three weeks the stump was entirely healed. The fistulous openings from the humerus and rib continued to discharge some pus, and occasionally pieces of bone, for many months, but the fistulæ finally healed. Subsequently, the patient continued to suffer more or less with rheumatism at different periods, particularly in cloudy, damp weather—the disease attacking different parts of the body, at one time involving the right knee joint to such an extent as to cause serious apprehension that this might share the same fate as the left lower limb. At another time the sternal half of the right clavicle was affected and considerably enlarged. He has been treated with various constitutional remedies up to January 1st, 1876. Since this time he has simply used local embrocations and anodyne liniments. His condition at this time (October 10, 1876) is very favorable; his general health quite good, active and strong, able to take out-door exercise, &c. Yet

that same rheumatic taint or poison remains in the constitution, being hereditary in this case, and manifests itself occasionally in different parts of the system.

Very likely nature affords a more prompt and efficient remedy for this and similar cases, in many of the mineral springs of Virginia, rich in the salines, alkalies, &c. As resident physician at the Blue Ridge Springs, I have known rheumatic invalids derive speedy relief from the use of these waters, when very slight improvement and no permanent benefit had been derived from the treatment of physicians. A case in point is that of a youth in my own practice, who was subject to frequent and violent attacks of acute rheumatism, involving the heart to such an extent as to be often very alarming. In his great anxiety, his father took him to the late Dr. Mettauer, of Prince Edward county, but he received very little benefit from the treatment of that eminent physician, but finally obtained relief from the remedial virtues of the Buffalo Lithia Springs, at which place he spent the last two summers. He is now in the enjoyment of good health. How is it that nature, through her chemical agents, does sometimes effect cures of disease, when doctors fail in the same, although prescribing identical agents scientifically prepared by the pharmaceutical chemist, is as yet inexplicable.

A Case of Apoplexy with Contracted Pupils—Post Mortem Examination—Remarks. By THOMAS J. RIDDELL, M. D., Richmond, Va.

About four o'clock P. M., on the 24th of September, 1876, I was called to see a colored woman, 45 years of age, in *articulo mortis*. The pulse was full, irregular and slow; extremities cold; respiration difficult, but not stertorous; could exercise no control over deglutition; eyes closed and fixed, with pupils firmly contracted to the size of small pin heads—light had no effect upon them. There was complete loss, both of volition and sensation. She died about four hours after the attack began.

The antecedent history of this case was not satisfactory. I had never seen her before, and she had only been a resident of the city a short while. From what I could learn, she had enjoyed good health previously. While preparing dinner, between 2 and 3 o'clock P. M., she complained of vertigo, and took a seat, and in a few moments she fell over perfectly uncon-

scious, remaining in this condition to the last. My diagnosis was apoplexy—clot on base of the brain. There being suspicion, on the part of her friends, that she had been poisoned by her husband, who had left her a few days previous, an inquest was held over the body of the deceased; but no evidence could be elicited that tended to criminate any one. The jury rendered a verdict in accordance with my opinion, that she died from apoplexy. To relieve every possible doubt, I obtained permission to make a *post mortem* examination. On the following evening, assisted by my friends, Drs. Tompkins and Crane, an examination of the brain was made, which developed the true cause of death, and verified my diagnosis. A clot of blood, about the size of a pullet's egg, was found in the fourth ventricle, and resting upon the pons varolii.

With reference to the condition of the pupils in apoplexy, some distinguished authorities say that the pupils are invariably dilated; if not both, one is dilated and the other contracted, and it is a rare occurrence that we meet with a case of apoplexy in which both pupils are firmly contracted. Few authorities make mention of this departure from the general rule. The condition of the pupils depends upon the location of the pressure upon the brain.

Book Notices, &c.

Treatise on Hernia, with a New Process for its Radical Cure. By GREENSVILLE DOWELL, M. D., Professor of Surgery in Texas Medical College, etc. Philadelphia: D. G. Brinton. 1876. Pp. 205. Price, postpaid, \$3.00.

The simplicity of the author's operation, and of the necessary implements therefor, and the remarkably successful results achieved, will make the operation introduced by Dr. Dowell of equal importance to any of those now adopted. Of 96 operations performed according to Dr. Dowell's method, there have been 80 cures and 16 failures—including among the failures two or three cases that should not be attributed to the operation itself. Since his book was published, he has successfully performed his operation upon a patient in Abingdon, Va., which should be added to the 90 cases. The operation should unquestionable be recorded as among the Advances in Surgery.

On looking back over the chapter on Palliative Treatment of Reducible Hernia, we are sorry to see no mention made of the truss made by Mr. Ayres, of this city, which, by those who have used it, is regarded as the simplest and surest of its kind. But we have not the opportunity here to dilate upon the excellence of this or that truss.

A second part of Dr. Dowell's book contains his Original Contributions to Operative Surgery, and a description of new surgical instruments which he has devised. Descriptions of his "Male Catheter for Stricture, and

New Method for Retaining it in the Bladder," "Arrow Extractor," "Needle for Ligation of Varicose Veins," "New Instruments for Lithotomy," &c., have already been published in the *Monthly*.

Our space for book notices is limited. In regard to this Treatise, we have only to add that it is written in an unpretending style, is clear in its meaning, and is a *practical* work.

Modern Therapeutics: A Compendium of Recent Formulæ, Approved Treatment, and Specific Methods in Medicine and Surgery, with an Appendix on Hypodermic Medication, Inhalation, Eratation and other Remedial Agents and other Therapeutic Methods, of Recent Introduction. By GEORGE H. NAPHLEYS, A. M., M. D. Fourth Edition, Rewritten and Enlarged. Philadelphia: D. G. Brinton, 1877.

The editor, Dr. D. G. Brinton, informs the readers that when more than one-third of the present edition had passed through the press, the author died, and that the completion of the publication was left to him. Notwithstanding the embarrassments under which he labored, the editor has done his work admirably, and has presented a volume of equal value and popularity to any of the former editions. The full scope of the work is well explained in the first sentence of the author's preface. It "differs from ordinary works on the Practice of Medicine, in being devoted *exclusively* to Practice; from works on Materia Medica, in treating only of Therapeutics; and from a Formulary, in that it is not a mere collection of prescriptions, but aims at a systematic analysis of all current and applied means of combating disease." True, we find omissions of many prescriptions which are favorites with us and those around us; but each practitioner can make his copy of this work the more valuable by marginal notes and references. As the volume stands, however; it is an exceedingly valuable book for clinical purposes..

Principles of Human Physiology. By WM. B. CARPENTER, M. D., F. R. S., F. G. S., F. L. S., Registrar to University of London, etc. Edited by HENRY POWER, M. B., Lond., F. R. C. S. A new American, from the Eighth Revised and Enlarged English Edition, with Notes and Additions, by FRANCIS G. SMITH, M. D., Professor of Institutes of Medicine Univ. Pennsylvania. Philadelphia: Henry C. Lea, 1876. Pp. 1083. (For sale by West, Johnston & Co., Richmond.)

This work has such a world-wide reputation—it is the text book in so many institutions—that it is necessary only to announce that another edition is ready. The work of the editors—English and American—has been thoroughly performed, so that the work "now accurately represents the existing state of physiological knowledge."

The Southern Side: or Andersonville Prison. Compiled from Official Documents. By R. RANDOLPH STEVENSON, M. D., formerly Chief Surgeon of the Confederate States Military Prison Hospital at Andersonville, Ga., etc. Baltimore: Turnbull Brothers, 1876. Pp. 488. (For sale by all Booksellers.)

We hope the facts contained in this book will forever quiet the baseless charges of inhumanity which have been brought against the South by unprincipled politicians and a few slanderous medical writers.

Turning to the medical statistics, we find (page 404) that 45,613 prisoners were received at Andersonville during the thirteen months existence of the prison; that of this number, 18,000 were registered patients; and that 12,912 died. This array of figures is certainly appalling. On page 452, we are informed, however, that the ratio of mortality among the guard was

equally as great—notwithstanding the natural depression of spirits of prisoners, etc., must have been a serious element in the sickness of the prisoners. The same water for drinking and cooking purposes, the same quantity and quality of food, etc., was used by the prisoners as by the guard.

The principal causes of death were unavoidable over crowding, the impossibility of providing suitable accommodations, of supplying proper food, and of obtaining the necessary medicines.

The principle diseases causing death among the prisoners were, diarrhœa, 4,817; dysentery, 1,384; scurvy, 3,574; gangrene, 678; anasarca, 377; pneumonia, 321; typhoid fever, 229; debility, 198; remittent fever, 177; gun-shot wounds, 155; consumption, 137; unknown, 448. Had the prisoners been accepted in exchange, a large number of the above deaths would have been avoided—certainly the scurvy cases could have been prevented. But it is useless to speak of what might have been.

Dr. Stevenson has done a valuable service to the future historian in putting the facts in his possession in permanent, accessible form. There is appended to the work a list of prisoners who died at Andersonville, alphabetically arranged by States and names, showing the regiments and companies to which they belonged, and date of death.

Coughs, Consumption and Diet in Disease. By HORACE DOBELL, M. D., F. R. M. C. S., etc., Consulting Physician to the Royal Hospital for Diseases of the Chest, London, etc. Philadelphia: D. G. Brinton, 1877.

This work contains a series of extracts from the published lectures of the author "so arranged that they form a connected treatise on the diagnosis and treatment of some of the most common diseases of the respiratory organs." We find in this little book a *great deal* to approve, and but little to criticize. Dr. Brinton, the well known editor of the *Half-Yearly Compendium* and the *Medical and Surgical Reporter*, deserves the thanks of the profession for the publication of books of such practical value to every physician as he has lately issued.

Epitome of Skin Diseases, with Formulæ. By TILBURY FOX, M. D., F. R. C. P., Physician to Department for Skin Diseases in University College Hospital, and T. C. Fox, B. A. (Cantab.), M. R. C. S. Philadelphia: Henry C. Lea, 1876. Pp. 120. (For sale by West, Johnston & Co., Richmond.)

This small duodecimo volume is really a very useful epitome for practitioners as well as students. Part I gives 20 pages to general observations: Part II (69 pages) gives the description and treatment of skin diseases (alphabetically arranged); and Part III (21 pages) contains formulæ of remedies, etc.

The Use and Value of Arsenic in the Treatment of Skin Diseases, by L. DUNCAN BULKLEY, A. M., M. D., Physician to the Skin Dept. Demilt Dispensary, N. Y., is a reprint from the *New York Medical Journal*, August, 1876, of a most valuable essay read before the American Medical Association, June, 1876. It is presented now in book form—45 pages—for convenience of reference.

A Treatise on the Theory and Practice of Medicine. By JOHN DYER BRISTOWE, M. D., Lond., F. R. C. P., Physician to St. Thomas' Hospital; Joint Lecturer on Medicine at the School, and Examiner in Medicine to the Royal College of Surgeons, etc. Edited with Notes by JAMES H. HUTCHINSON, M. D., one of the Attending Physicians to the Penn. Hospital, etc. Philadelphia: Henry C. Lea, 1876. Pp. 1069. (For sale by West, Johnston & Co.)

This is undoubtedly the best of the single volume text books on practice

of medicine published or republished in this country for the past eight or ten years. We agree fully with the editor in believing that "no other work * * * has been equally successful in bringing within the compass of a single volume the description of so large a number of diseases." Our want of space forbids a lengthy notice; but we have written the first sentence after a careful and comparative reading of many articles in the volume. Its short comings are few.

Contributions to Reparative Surgery. By GURDON BUCK, M. D. Illustrated by Numerous Engravings. New York: D. Appleton & Co., 1876. Cloth. Pp. 237. (For sale by Woodhouse & Parham, Richmond.)

This is a work long needed. It shows the application of Reparative Surgery to the "treatment of deformities produced by destructive disease or injury, congenital defects from arrest or excess of development, and cicatricial contraction from burns." The work contains the author's experience in a classified order. The cases described are illustrated by drawings from photographs taken before and after operations. These *Contributions* do not form a systematic treatise; but, from a proper study of them, valuable suggestions may be obtained to guide surgeons in treating cases that may arise in practice. We would be glad to see the second edition enlarged into a systematic work. There is room and use for such a volume. Until our wish is met, we cordially commend the present book.

Editorial.

New Feature in the Monthly.—We are glad to be able to announce to our patrons a new feature in the management of the *Monthly*, which, we are sure, will add very materially to its interest. We intend to present every few months a fine steel-plate engraving and a biographical sketch of some eminent medical man. A recently executed engraving and a carefully prepared biographical sketch of Dr. J. Marion Sims accompanies this number, which will be welcomed by the many friends and admirers of this great surgeon, who has so much reason to be proud of the honors he has so justly won. Indeed, of no one in the profession have Americans a greater right to boast than of Dr. Sims.

The April number, 1877—the first of the Fourth Annual Volume—will contain a fine steel-plate engraving of Dr. Wells—the discoverer of anæsthesia—which will accompany an article on the *Discovery of Anæsthesia* promised by Dr. Sims.

We have also made arrangements to present to our subscribers sometime during the coming summer or autumn a steel-plate engraving and a biographical sketch of Dr. Hunter McGuire, late Medical Director of "Stonewall" Jackson's Army Corps, and now Professor of Surgery in the Medical College of Virginia, President of the Association of Medical Officers of the Confederate States Army and Navy, etc.

Arrangements are now being perfected for engravings and sketches of other distinguished men, to be hereafter announced. The engravings will all be of the finest possible character, and will be suitable for framing if desired. These alone will be worth the cost of subscription.

Many years ago, *The Stethoscope*, which was published in this city under the auspices of the *first* Medical Society of Virginia, issued with many of its numbers pictures of some of the more prominent men in the Virginia profession of that day, giving with each likeness a short biographical sketch. In this way, pictures of Nelson, Beale, Marx, B. R. Wellford, John Cunningham, Haxall and others were presented to its subscribers. These gentlemen—some of whom are still living—were all worthy of the honor they received. But in making selections for the *Monthly*, we do not intend to be restricted to Virginians or Southerners, or even Americans, but we will, from time to time, present engravings and sketches of some of the most prominent medical men of the world.

All this, of course, entails additional expense, which we are glad to say the increased popularity of the *Monthly* justifies. But we hope our subscribers will appreciate the effort we make to interest them; and in view also of the fact that the fourth annual volume will be enlarged to an *eighty page monthly*, we trust that our friends everywhere will do what they can to send us new subscribers.

Soluble Bougies for Gleet.—We invite attention to the soluble bougie or “porte-rémède Reynal,” made in Paris, and sold by Messrs. Meade & Baker, pharmacists, No. 919 Main street, Richmond, Va. These bougies are six or seven inches long, round, smooth, and about the size of a No. six or seven catheter; rather brittle when dry, but if dipped in warm water for a few seconds, become flexible and slippery, so as to be easily introduced into the urethra. They consist of gelatin, properly tempered with gluten and glycerin, and are medicated with sulphate of zinc. The bougies are easily introduced in the urethra and left there to dissolve, which will require about two hours. By this means, the remedy is brought into *immediate and prolonged contact* with the diseased surfaces, which is rarely done by injections, owing to the ignorance of patients, and to the fact that the highly sensitive mucous membrane of the urethra is often irritated to the extent of producing spasmodic contraction. Even when injections are used intelligently, the fluid does *not remain* long enough in contact with the diseased surface to do the desired good. The soluble bougies overcome this difficulty.

They cause no sensation of pain or uneasiness, and, in many cases, it is said, two or three have cured when other remedies have failed. They are highly approved by Dr. M. Lorey, the interne of the Hôpital du Midi, Paris, and by practitioners in London and New York, and should be more fully tested.

Officers of the Baltimore Medical and Surgical Society, elected January 4th, 1877, are Drs. W. W. Murray, President; R. W. Mansfield and S. W. Seldner, Vice Presidents; W. Brinton and C. C. McDowell, Recording Secretaries, Geo. L. Wilkins, Reporting Secretary; D. W. Cathell, Treasurer; J. J. S. Lynch, A. B. Arnold and L. B. Winternitz, Committee of Honor; T. B. Evans, J. J. Caldwell and W. J. McDowell, Committee on Lectures and Diseases; J. Morris, J. Rehberger and A. Erich, Executive Committee.

The Meetings of the Richmond Academy of Medicine have been changed to the first and third Tuesday nights of each month. At its second meeting in December, 1876, Dr. J. G. Skelton was elected President, Drs. W. A. Lee and ——— Jeter, Secretaries; J. N. Upshur, Treasurer. It is to be hoped that the ethical discussions, which have done so much to impair the value of the meetings of the Academy for the past six months, are at an end; and that hereafter we shall have the pleasure of presenting, as in former days, reports of cases and discussions of value and interest to every student of medicine.

The Transactions of the Medical Society of Virginia, which are bound with this issue of the *Monthly*, will be found of interest to all our readers. It was the request of the Publishing Committee of the Society that we should diminish the number of journal pages of this issue, in order that greater prominence might be given to the Transactions—a request with which we the more readily comply, as our October number, 1876, contained about 35 or 36 more pages than our usual size. In taking up so much space at that time to report the proceedings of the International Medical Congress, we stated that we would be compelled to lessen the size of some number; and no time is more suitable than this for doing so.

The Physician's Hand-book for 1877, by Drs Wm. & Albert D. Elmer, is just out—published by W. A. Townsend, New York. The high appreciation of this visiting list is evidenced by the fact that this is its 20th year. Bound in English morocco. Price reduced to \$1.75, with printed matter—classification of diseases, alphabetical list of all known remedial agents, list of poisons, antidotes, etc. It is an excellent visiting list.

The Texas Law Regulating the Practice of Medicine, which went into operation about January 1st, 1877, we learn from the *Lampasas Dispatch*, requires the District Courts of the State to appoint Boards of Medical Examiners, of not less than three members each, for their respective districts, which Board shall meet semi-annually to examine all applicants for practice on anatomy, physiology, pathological anatomy and pathology, surgery, obstetrics and chemistry. Certificates of approved examinations shall be recorded with the clerk of the District Court of the county in which the parties reside. Each applicant is required to pay \$15 for examination. Any member of a Board has authority to grant, after examination, a temporary license. The penalty for violation of this law is a fine of not less than \$50, nor more than \$500. The law exempts from examination females who practise midwifery strictly as such, and all others who were registered as practitioners under the law of 1873, or who had been in continuous practice five years before the passage of the bill. Possession of a diploma does not excuse the party from examination.

The Bill to Establish a Board of Medical Examiners in Virginia was reported favorably by the Committee, and was ably advocated by some of its friends when brought up in the House of Delegates. After considerable discussion, however, the bill was dismissed—one of the grand arguments against the bill being that it was a *Richmond city scheme*. Such remarks show how comparatively little has been done by the country physicians generally to instruct their legislators, and how faithfully the profession of this city has done what it could for the success of the measure. If the unanimously adopted resolutions of the State Medical Society on this subject mean anything—if the profession is really in earnest about this matter, seeking to benefit the communities in which they live, and to elevate the standard of the profession, let them now act. Physicians wield a political influence as well as other people. At the next legislative elections, let the profession assert its claims and demand its rights, and defeat the purely selfish demagogue aspirant for office.

The Medical Examiners' Law of California went into operation January 1st, 1877. It requires that every practitioner shall present his diploma for verification, which diploma shall allow the party to practise. If not a graduate, the party shall be examined by the Board. Each State Medical Society of California, whose members are required to have diplomas from some legally chartered medical college in good standing, shall

annually appoint a Board of seven members. Each Board shall issue certificates to those who may pass satisfactory examinations. A charge of \$1 is made upon each party whose diploma is recognized; but if it be found fraudulent, or not lawfully owned by the possessor, then the Board may charge \$20. Diplomas may be presented to the Board by letter or by proxy—thus not requiring personal attendance. Examinations of non-graduates must be made by the Board, before December 31st, 1876. After that date, every applicant for practice must possess a diploma. Each candidate for examination must pay \$5, which sum is returned if a certificate is refused. The fees shall be paid to the Medical Society by which the Board shall have been appointed. The expenses, &c., of the Boards shall be arranged by the respective appointing Societies. The Boards may refuse certificates to parties guilty of unprofessional or dishonorable conduct, and they may revoke certificates for like causes. Students are not prohibited from prescribing under the supervision of preceptors, nor are gratuitous services prohibited in cases of emergency. "Any itinerant vender of any drug, nostrum, ointment, or appliance of any kind, intended for the treatment of disease or injury [or] who shall, by writing or printing, or any other method, publicly profess to cure or treat diseases, injury or deformity, by any drug, nostrum, manipulation, or other expedient, shall pay a license of \$100 a month, to be collected in the usual way." Each violation of any part of the law is punishable by a fine of from \$50 to \$500, or by imprisonment in jail for not less than a month nor more than a year, or by fine and imprisonment. Any person who attempts to file the diploma of any other party shall be guilty of felony.

The above synopsis of the law as printed in the *N. Y. Med. Journal*, January, 1877, is intended to allow "regulars" to appear before the "regular" State Medical Society; "homœopaths" to appear before the "Homœopathic State Medical Society," etc.

The Vaccine Agent of Virginia.—The resolution introduced in the House of Delegates by Mr. Strother, of Giles county, virtually looking to the abolishment of the State vaccine agency, was rejected by a large majority of the House. The office is a most important one; and the present officer (Dr. Harris) has been of service to other States in supplying them with vaccine virus.

The Quarterly Journal of Inebriety, published under the auspices of the American Association for the Cure of Inebriates, Hartford, Conn., was begun December, 1876, 64 pages, \$3 a year. Dr. T. D. Crothers, Binghampton, N. Y., Secretary of

the Publishing Committee, is editor. This December No. contains some excellent papers—one especially by Dr. George M. Beard, on *Causes of the Recent Increase of Inebriety in America*. If this enterprise is well sustained, it will fill an important journalistic want.

The Detroit Medical Journal is the title of the journal to be begun January, 1877, formed by the consolidation of those two excellent journals, *Detroit Review of Medicine and Pharmacy* and the *Peninsula Journal of Medicine*. Editors, Drs. J. J. Mulherron and Leartus Connor. Published by the Detroit Medical and Library Association. Increased to 80 pages monthly. Price \$3 per annum. Why may not the Michigan State Medical Society hereafter publish its Transactions in connection with this journal, just as the Medical Society of Virginia has done for the past three years with the *Monthly*?

The Editorship of the Atlanta Medical and Surgical Journal changed with the October issue. Dr. W. F. Westmoreland, after twenty years of earnest and efficient editorial life, retires; and Drs. S. G. and R. W. Westmoreland come in. This, and the *New Orleans Medical and Surgical Journal* are both journals that we can especially commend to those of our friends who are revising their list of journals to be taken during the new year.

Resolutions of the Richmond Medical Profession in Token of Their Respect for the Memory of Dr. John Dove.

The last link between the medical profession of to-day and the celebrated men of the last century is broken. Dr. JOHN DOVE no longer lives. In the field of practice with McClung, Foushee and McCaw; cotemporary of Henderson, Patteson and Clarke, his life has bridged over a hundred years, and leaves a vacuum never to be filled.

We, his successors in the work which he so faithfully performed, meet together to-night, not to mourn his ripe departure, from labor and sorrow to an everlasting rest—not to weep over a life extended to its utmost limits, and crowded with so many traits of usefulness and virtue—but rather to point our professional brethren to him as a model for imitation, a monument to be revered; to one who, as a man, a physician and a gentleman, filled our highest demands, and reflected lustre on our profession. Be it, therefore,

Resolved, That the Richmond Medical Profession recollects with pride the noble character and faithful services of their deceased brother, Dr. JOHN DOVE, and calls upon all its members to emulate his bright example, as illustrated through a long and eventful life.

Resolved, That the profession, sympathizing with his family in their bereavement, and desirous to show their great respect for his memory, will wear the usual badge of mourning for thirty days.

Resolved, That the Chairman of this meeting be instructed to appoint two members of the profession to act as pall-bearers, and that the whole fraternity are invited to attend his funeral in a body.

Resolved, That a copy of these resolutions be sent to the family of the deceased by the Secretary, and also be published in the *Va. Medical Monthly*.

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Original Communications.

ART. I.—*Digestion and its Disorders.* W. W. MURRAY, M. D.,
Baltimore, Md. (Read before the Baltimore Medical and
Surgical Association.)

The subject for discussion this evening is one of great practical importance to both physician and patient: To the physician, because of all the numberless ills to which flesh is heir, there is scarcely any with which he more frequently meets than some form of digestive disorder, and because there is none, the successful management of which is more likely to cause distrust and want of confidence in him: To the patient, because while it entails constant discomfort, and, in many cases, utter wretchedness, it at the same time lays the foundation for, and may become the cause of, organic lesions in different parts of the economy which may carry him to an untimely grave.

The title of this paper not only gives me the privilege, but lays upon me the necessity, of considering digestion in its physiological as well as in its therapeutical aspect; and whilst I do not propose to encroach upon the time of the Association by any reference to the anatomy of the organs of digestion, it may not be unprofitable to consider briefly the fluids concerned in the process, if only to refresh our memories in regard to their physiological properties.

Physiology of Digestion.—The first act in the process of digestion is that of mastication, by which the purposes are accomplished, viz.: the reduction of the food into a pulpy mass, and

its thorough incorporation and admixture with the secretions of the salivary glands.

The quantity of *saliva* secreted per day will vary according to varying circumstances. If the food be hard and dry, the secretion is very free and abundant; if the food be soft and moist, the necessity for saliva is less, and consequently the amount poured forth is much smaller. Then, again, it is largely increased by the different condiments. But the average amount has been estimated by Dalton at about 1300 grammes (*i. e.*, 44 ozs.), and by Bidder & Schmidt at 1600 grammes (51 ozs.).

One of the uses of the salivary secretion is to aid in exciting the sense of taste by dissolving such ingredients of the food as are soluble in it, thus enabling them to be absorbed and to come in contact with the terminal filaments of the gustatory nerve. Another and probably the chief purpose subserved by the saliva is to coat the bolus of food with a viscid secretion, and to lubricate the parts concerned in mastication and digestion, in order to facilitate these two acts.

Saliva possesses the additional property of converting *cooked* starch into glucose, and it was formerly supposed (and still is by some physiologists) to be the chief agent in transforming amylaceous articles of food into that form in which alone they are capable of being absorbed. But while it is true that not only does the saliva enjoy this property, but that the change begins very quickly under the proper conditions, yet it is very questionable indeed whether, during the brief period of time a morsel of food remains in the mouth, the transformation effected in starch by the saliva is sufficient to deserve to be considered at all.

Even by those who claim that this is one of the great uses of the salivary secretion, it is acknowledged that the objection just urged is valid; but they believe that its power over starch continues to be exerted after the food has reached the stomach. On the other hand, it is asserted by such authorities as Bernard, Dalton, Colin and others that the presence of the gastric juice effectually arrests the action of the saliva. Dalton found that if equal volumes of saliva and gastric juice be mixed with a solution of starch in the water, both at 100°F., there is no reaction indicating the presence of sugar at the end of five minutes,

and only an imperfect reaction at the expiration of half an hour. But if three volumes of gastric juice and one volume of saliva be added to the starch, the mixture gives no indication of sugar even at the end of an hour. Whence he concludes that inasmuch as the amount of saliva is never in greater, if as great, proportion to the gastric juice as one to three, no transformation of starch into glucose is wrought by the saliva after deglutition. Experiments upon dogs strengthen the conclusion. It has been found that when these animals were fed upon a mixture of meat and boiled starch, no sugar existed in the contents of the stomach at any time. Starch was found for a considerable time, but even after it disappeared there was still no sugar, the disappearance of the starch being due, not to any chemical change, but simply to its passage into the duodenum.

The *gastric juice* is next to be considered. This secretion is the great solvent of albuminous matters, and it owes this power to its acidity and to that ingredient which we call *pepsine*. The gastric juice is always acid, and very markedly so, as it always contains a *free acid*. It does not appear to be satisfactorily determined, even at this day, whether the acid of the gastric secretion is lactic or hydrochloric. Graves, of Dublin, as long ago as 1823, asserted that it is lactic acid. In 1830, Berzelius made the same assertion, and he is generally credited with being the first to do so, though Graves was seven years ahead of him.

Both pepsin and a free acid are indispensable factors in the digestion of nitrogenous food; neither can act alone. Pepsin cannot convert albumen into peptone except in the presence of an acid liquid. If the gastric juice be rendered neutral by the addition of an alkali, digestion is immediately arrested, though it will be resumed if the fluid be rendered acid again.

On the other hand, albumen might lie in an acid liquid for an indefinite time, and never be converted into albumen unless pepsin be present.

The gastric juice is a very stable compound. It will not only not undergo putrefaction itself, but it will arrest putrefactive changes already begun in organic substances. It is owing to this property that game can be eaten with impunity when it is, as they call it in England, "high," a condition not merely of incipient, but of pretty well advanced, decomposition.

It is to be observed that the action of the gastric juice is not limited to the stomach, but it continues to be exercised even after the food has passed into the intestines.

The average quantity of the gastric juice secreted during 24 hours, has been estimated at 6000 grammes (about 200 ozs.).

Immediately after the ingestion of food, the gastric mucous membrane becomes injected with arterial blood, the temperature is slightly increased, and the gastric juice begins to be secreted. Simultaneously with these changes, the peristaltic action of the stomach is excited, by which the food is churned up, carried backwards and forwards, and intimately incorporated with the gastric juice. As we have seen, the albuminoid materials become softened and converted into peptone. If amylaceous or oleaginous matter be combined in the food with the nitrogenous elements, the former are simply set free, to be acted upon by other agents at the proper time and in the proper place.

The *pancreatic juice* plays a very important part in chylification. Of the ingredients of this fluid, the chief one is *pancreatin*. While the salivary and the gastric secretions possess respectively but one chemical property, the action of the fluid under consideration would appear to be at least three-fold.

1st. It possesses the power of converting starch into glucose, and that, too, in a very marked degree. According to the statements of investigators who have experimented with both fluids, the power of the salivary secretion in this respect is very feeble compared with that of the pancreatic juice; and the action of the latter is not limited to hydrated or cooked starch as the former is, but it extends even to the raw article.

2d. It possesses another property of equally as great importance as that just referred to, viz.: that of converting oils and fats into an emulsion—that is, of reducing them to a state of the most minute subdivision, thus rendering these essential elements of our food capable of being absorbed and assimilated. It was formerly supposed that the bile was the chief, if not the sole, agent in working this change; but Bernard has shown that, in the rabbit, at least, it exists in such power, and there is no reason to suppose that the case is different in man.

3d. The pancreatic juice is endowed with the additional power of dissolving coagulated albuminous matter. Bernard, to whom

we owe so much of our knowledge of physiology, and Corvisart were, the first to discover that this property pertained to the secretion of the pancreas, and the same conclusion has been reached by other investigators, though it is still denied by some. Upon the whole, however, there is scarcely a doubt but that it does possess this power, and hence in this regard it may be supplemental of, and auxiliary to, the gastric juice, especially when the latter agent becomes from any cause deficient in quantity or impaired in quality. The quantity of pancreatic juice secreted per day is difficult to be ascertained with accuracy; it has, however, been estimated at about 800 grammes (26 ozs.), a quantity immensely below that of the gastric juice; but it is to be remembered that the active organic ingredient (pancreatin) is present in much greater proportion than the corresponding element of the gastric secretion.

The *intestinal juice* is not to be overlooked in this necessarily imperfect review of the physiology of digestion. The sources of this fluid are two-fold:

1. From the glands of Brunner, which are found almost exclusively in the upper third of the duodenum.
2. From the follicles of Lieberkuhn, which exist throughout the entire extent of the small intestine.

Brunner's glands being few in number, speaking comparatively, and being confined to a small section of the intestine, it is fair to presume that whatever property, digestive or otherwise, is enjoyed by the intestinal secretion, is due chiefly to that portion of it which is elaborated by the follicles of Lieberkuhn. However that may be, the mixed fluids of both sets of glands has been found to possess two properties in common with the pancreatic juice, viz.: that of converting starch into glucose, and that of forming oils into an emulsion, though it exerts these powers in a much more feeble degree than does the pancreatic secretion.

I shall conclude my remarks on the physiology of digestion by a brief reference to the *bile*. I do not propose to detain you with any observations upon the uses of the bile, for the simple reason that we know nothing about them. We know that bile is essential to life. We know that animals gradually emaciate and eventually die of inanition when the bile is drawn off through a fistula and not allowed to enter the intestinal canal, while at

the same time the appetite remains unimpaired and the digestion perfect. And this being so, we know that bile is *not* essential to digestion, but that it is essential to assimilation, but when we have said this, we have said all that is known about it.

Disorders of Digestion.—The second division of our subject will be treated of under the three heads of symptoms, causes and treatment.

In regard to the *symptoms* of dyspepsia, very little need be said, as we are all familiar with them. They may be enumerated as follows: A feeling of sinking or emptiness in the stomach, which is difficult of description, and needs to be experienced to be appreciated. It is not a pain exactly, but an uneasiness which is harder to be borne patiently than an actual pain; and this feeling is experienced more generally when the stomach is void of food. Pain of very decided character when food is taken; nausea; eructations of gas, and regurgitations of food or of an acid, sometimes greasy, and sometimes bitter fluid into the mouth; flatulency; cardialgia; appetite uncertain, sometimes suspended, sometimes voracious, and sometimes perverted. All the symptoms mentioned are local; but there are many others in distant parts, such as the sensation of a ball in the throat; headache; vertigo; *muscæ volitantes*; palpitation of the heart; furred tongue; diminution in the amount of bile; generally constipation, though sometimes diarrhœa; dry skin; hot and cold flushes alternating with each other; loss of flesh; mental depression, &c.

Causation.—One of the most frequent causes of disorder of the digestive apparatus is imperfect mastication; and when this habit exists, as it generally does, with the equally pernicious one of eating rapidly, dyspepsia is certain to result. These two habits are generally observed in our active, energetic business men, whose minds are forever on the stretch, and who have this additional prolific source of dyspepsia to contend against, which comparatively few of them do successfully.

Hurried eating is injurious not only by the imperfect mastication which the food undergoes, thereby rendering it much more difficult to be permeated and acted upon by the digestive fluids, but also by producing over-distension of the stomach, because when the food is swallowed rapidly, the appetite does not abate

before more has been ingested than is required, and the movements of the stomach which, are so necessary to digestion, are impaired, and, it may be, entirely arrested.

Over-distension is injurious also to the nerves of the stomach, and in this way gives rise to that feeling of uneasiness and pain which attends excessive indulgence at the table. And further, the irritation, to which the nerves are thus subject, will necessarily interfere with the character and supply of that secretion over which they preside, and will render it incapable of exerting its chemical action upon the food.

Sedentary habits, combined with very close application of the mental powers, is another very frequent cause of dyspepsia. Anæmia, grief, mental anxiety, &c., will often give rise to digestive trouble, and be, in turn, aggravated by it. The inordinate use of tobacco is very hurtful to the digestive apparatus. Its injurious effects are generally attributed to the waste of saliva which it occasions; but believing that this agent plays but an insignificant part in the process of digestion, my own opinion is that tobacco does harm by its depressing influence over the nervous system, interfering with the proper enervation of the secreting apparatus, and thus rendering the secretions deficient in quantity, or poor in quality, or both.

Excessive sexual indulgence will frequently produce dyspepsia; in fact, any cause which enervates and devitalizes the system may give rise to this disorder. Most of the cases of uterine disorder met with in practice, if they are at all chronic, are attended by dyspepsia; this may be due to the excessive disturbance of the nervous system which uterine trouble produces—the nerves of the stomach participating in the disorder of the system at large; but it is also due, in great part, to the impoverishment of the blood consequent upon the loss of albumen in the form of leucorrhœa, which is a concomitant of almost any phase of womb trouble.

Treatment.—Writers on dyspepsia generally treat of its management under the three heads of diet and regimen, moral treatment, and the administration of medicines, and as this division is a useful and practical one, I shall adhere to it in my remarks on this portion of the subject.

1. *The Diet and Regimen.*—The dyspeptic must learn to eat

slowly, for reasons already given. It is no matter for wonder that we are a nation of dyspeptics, when we go into a merchant's restaurant or to a hotel table, and see every man manipulating his knife and fork as if he were eating against time for a wager. This abominable habit must be given up by him who would enjoy healthy digestive powers. He must also masticate his food thoroughly; if imperfect grinding of the food be due to mere habit, it must be broken; if it be due to bad or deficient teeth, let him patronize a good dentist immediately, and obtain from art what nature has denied him, and thus enable himself to perform this, the very first of the essentials of perfect digestion. Tough meats should be avoided on account of the difficulty of masticating them perfectly, even with a good set of molars. Minced meats are particularly difficult of digestion.

Roast beef, especially if it be rare, is very digestible; mutton still more so. As a rule, fish are more difficult of digestion than meats are. Poultry—chickens, turkeys, ducks and geese are to be preferred in the order mentioned. Eggs are very suitable when properly cooked. They should not be boiled more than three minutes. A better way is to put them in cold water, and remove them as soon as it boils.

Pastry of all kinds is to be avoided, as it is very indigestible. The condiments, in moderate quantity, rather promote digestion, but their excessive use is to be deprecated; otherwise they will do harm by over-stimulation, resulting in subsequent deficient secretion. Small quantities of alcoholic drinks will promote digestion when the process is slow and imperfect; but if taken in excess they interfere with the secretion of the gastric juice. The danger of contracting the habit of drinking, even when taken in small quantities, should not be overlooked, and should make us cautious in recommending them.

The excessive use of cold water during and after meals is a very injurious habit, and one often indulged in by dyspeptics. It is harmful in several ways. 1st. By depressing the local circulation, thereby retarding the secretion of the gastric juice. 2d. By diluting the gastric juice, thereby reducing its digestive power. 3d. By lowering the temperature, thereby retarding digestion, which is more perfect and complete at 100°F. than either above or below that point. 4th. By producing over-

distension of the stomach, which, as we have seen, is so unfavorable to the digestive process.

In 1873, Brown-Séquard published an article on a new method of treating functional dyspepsia. The new method consisted in requiring the patient to eat, instead of three times daily, as often as every ten or fifteen minutes, only a small portion of food being taken at a time; and he claimed for it the most brilliant results. In 1869, I myself was the subject of dyspepsia, brought on by sedentary habits, intense mental application and the excessive use of tobacco. The object I had in view necessitated both the sedentary life and close and unremitting study, and I found by experience that the only way that I could live with any comfort at all was by keeping a cold roast of beef on my table, and eating a very small piece every few minutes. I have never tried this method on others, but from the immediate relief it gave me, I am prepared to believe that Brown-Séquard has not over-estimated the beneficial results which may be expected from it. The trouble would be to induce patients to practise it thoroughly.

As regards the regimen suited for dyspeptics, I may remark that *out-door* exercise must not be neglected. The exercise may be either active or passive, or both combined, but in one or other form it is absolutely necessary. Walking is probably the best form of active exercise; rowing, gymnastics, the health-lift, &c., are all good. The combination of both kinds of exercise in horseback riding is especially to be commended. But whatever be the form resorted to, whether it be active or passive, or a combination of both, it should never be carried to the point of fatigue, nor should it be indulged in shortly after a meal. If the patient be too feeble to take any form of active exercise, he should still go out in open air, as in sailing or driving.

The dyspeptic should have regular habits, and should avoid excessive indulgence in sleep, and especially should he not lie on a feather bed; no form of bed is comparable to a hair mattress. The amount of bed clothing, too, should be regulated with care; just enough cover to retain the animal heat, without being too heavy, should be the rule. If the quantity required to keep the individual warm be so great as to be uncomfortably heavy, it may be obviated by the use of an eider-down quilt; or

if this be out of reach, the simple plan of pinning a layer of newspapers over the blanket will answer every purpose.

The external application of cold water is, in many cases, very beneficial, and may be employed as a plunge, shower or sponge bath, according to the inclination of the individual. Sometimes we meet with patients who cannot stand the shock of cold water, and who, consequently, are not benefited by its use. When, after a bath, the individual feels cold and chilly, and there is no healthy glow, even after friction with a rough towel, cold water is injurious, and must be arrested.

Moderation in all things, and over-indulgence in nothing, should be the watchword of the dyspeptic. There is no class of patients whose hearty and earnest co-operation is more necessary in our efforts to cure them, and there is no class, perhaps, in which we meet with less of it.

Moral Treatment.—It is well known that dyspeptics generally suffer from mental depression, and, in many cases, become a prey to gloom and melancholy. On this point, I can do no better than quote Sir Thomas Watson: "The management of the mind of the hypochondriac is peculiarly nice and difficult. It will not do to treat him as if his ailments are imaginary. He disbelieves you, contemns your judgment, and deserts you, to be fleeced, perhaps, by some villainous quack. You must hear what he has to say, show an interest in his case, gain his confidence, and the battle is half over." Whatever be the bond of that mysterious union between mind and body, we know that the union is so intimate that whatever affects one will react upon the other. Hence mental diversion is necessary; accordingly, we find that when physical and mental exercise can be combined in open air, as, for instance, in gardening, hunting, fishing, &c., or in traveling through new and varied scenery, the dyspeptic will undergo immense improvement.

Medical Treatment.—There are two indications to be followed in the treatment of dyspepsia—one is to relieve symptoms, and the other is to cure the disease.

1st. *The Relief of Symptoms.*—Pepsin is of almost universal use in dyspepsia for facilitating the digestive process; and while it is of great service in one form of this trouble, it is to be feared that it is often employed without a clear understanding

of what it may reasonably be expected to accomplish; for this reason, it has been considered by some physicians of doubtful value. As the gastric juice is limited in its action to the albuminous elements of our food, it is evident that pepsin can be of service *only* in that form of dyspepsia in which this secretion, either from its deficient quantity or impaired quality, fails to convert albumen into albuminose; but in this form of digestive disorder, pepsin is a most valuable addition to our means of relief. The great difficulty is in our being able to determine with accuracy when we have to deal with this special form of dyspepsia. If, soon after eating, say within three or four hours, there be uneasiness and pain in the stomach, accompanied by gaseous distension of that viscus (provided the rules laid down in regard to proper mastication and to over-distension by food or drink have not been violated), and especially if these sensations are observed to follow a diet composed for the most part of animal food, the presumption is decidedly in favor of albuminous dyspepsia; but if there be, besides these, eructations of sulphuretted hydrogen, popularly known as "egg belch," then there is no doubt about it; and pepsin will do more good than anything we can give.

On the other hand, if there be amylaceous dyspepsia, indicated by acid eructations, heartburn, flatulent distension of the intestines, and passage *per orem et per anum* of a tasteless and inodorous gas, then pepsin can do no good. But fortunately we have another agent to arrest the case, in the form of pancreatin, the great digester of starch.

The same agent is very useful when we have reason to suspect indigestion of oils and fats. This form of dyspepsia is very much more rare than either of the two just spoken of, and it may be that it never occurs as a purely functional disorder, but it does sometimes exist when the pancreas is the seat of organic lesion. It very possibly occurs in phthisis also, because in this disease there is almost always an aversion to fatty articles of food; and improvement generally takes place as soon as we can promote their assimilation. And not only so, but, as far as my experience goes, cod liver oil emulsified by pancreatin gives better and more speedy results than the simple oil.

When gastric digestion is slow and imperfect owing to a de-

ficiency in the quantity of the gastric juice, in addition to the use of pepsin immediately after eating, I have found a combination of ipecac, capsicum and quinia to greatly promote the process. I usually give one grain of each in form of pill, but it should not be given until the patient is ready to begin on his dinner, otherwise the ipecac will occasion nausea; indeed, it is not uncommon to find that, even with this precaution, the single grain will nauseate; when this is so, I give a still smaller quantity—say half a grain.

In dyspepsia, as we all know, the intestines participate in the general atony, and there is, in the majority of cases, constipation. When this is so, I know of nothing better than one or two grains of the pil. rhei comp. with the dinner pill alluded to. This combination will generally not only increase the appetite and promote digestion, but it will also give a healthy, pleasant stool the next morning. I frequently find that two grains of the pil. rhei comp. give two or three stools; in that case, I give one or one and a half grain.

One of the most annoying, and at the same time most common symptoms which we are called upon to treat is *flatulence*. It may frequently be prevented by the use of the hyposulphites, or by sulphurous acid soon after eating. It may generally be relieved by the aromatics.

Acidity and heartburn are temporarily relieved by alkalis. Excess of acidity is believed to be due to a perverted action of the nerves of the stomach, and hydrocyanic acid has been found to be the most reliable agent for the correction of this condition.

Pain is met with under several forms as a concomitant of dyspepsia. Sometimes it is experienced some little time after taking food—say an hour or two—but at no other time. Fowler's solution will frequently cure it. Again, it is met with as a constant symptom, absent at no time, but greatly increased by taking food, though not aggravated by external pressure. Bismuth will sometimes relieve this pain; so will prussic acid; but in my hands, silver nitrate with a little opium, has proved the best agent. It has been stated that small doses of strychnia will relieve it when everything else has failed. Pyrosis is generally treated by bismuth, but Dr. Leard, of Dublin, states that

the purified oxide of manganese, in doses of 10-30 grains *ter die*, is a much more efficient remedy.

Having already trespassed longer on the time of the Association than I intended, I will be very brief in my remarks upon the fulfillment of the second indication, viz. : the cause of dyspepsia.

Although the causes of this disorder are manifold, they all give rise to dyspepsia in one or both of two ways, viz. : by interfering with the innervation of the digestive apparatus, or by producing debility of the muscular fibres of the stomach and bowels. And as long as dyspepsia remains a functional disease (the only aspect under which this paper proposes to discuss it), so long will we have to address ourselves to the correction of these two conditions. Accordingly, there is one rule applicable to all cases—the treatment must be constructive. We must, in all cases, have recourse to those medicines which give tone to the nervous, muscular and sanguiferous systems; hence iron, strychnia, quinia, the simple and aromatic bitters, the mineral acids, &c., are universally recognized as our chief agents in the cure of dyspepsia. In conjunction with these, we employ cold baths, friction to the surface, exercise, &c., and pay particular attention to all those rules, dietetic and moral, upon which enough has already been said.

Patients are sometimes met with who suffer from what may be called indigestion of liquids. This may exist alone, or it may be accompanied by dyspepsia of solid food. It is marked by the occurrence of the greatest pain and distress whenever any fluid, in however small a quantity, is swallowed. Such cases are very rare. I myself have never met with one. They are, according to authority and common sense, best treated by the patient taking food in as dry a condition as possible, and in abstaining as far as he can from the use of liquids.

Two or three years ago, Drs. Beard and Rockwell reported in the *Practitioner* six cases of dyspepsia treated by electricity, five of which were cured, and one was greatly benefited.

The leading symptoms in these cases were pain after eating, nausea, vomiting, pyrosis, constipation, anorexia, flatulence and mental depression. The methods of treatment were general far-

adization, galvanization of the sympathetic and pneumogastric, and central galvanization.

I have no experience in the use of electricity in dyspepsia, but I can well conceive that in what is sometimes called nervous dyspepsia (*i. e.*, when the secretions which accomplish digestion are deficient in quantity and depraved in character in consequence of impaired innervation) electricity might be of great service.

ART. II.—*Albuminoid Degeneration or Infiltration.* By JOHN C. PETERS, M. D., President of the Medical Society of the County of New York, and of the New York Neurological Society, etc. New York City.

These are names which are now frequently applied to the so-called waxy or lardaceous disease, and to amyloid degeneration.

Any part or structure may be affected, and usually several organs are involved. The liver, spleen, kidneys and absorbent glands are most liable to it, but it may attack the stomach, bowels, suprarenal capsules, muscles, brain and cord and their membranes, the tonsils, serous membranes and bladder. It may also affect morbid deposits in connection with inflammation, tubercle, cancer, &c.

The minute arteries and capillaries of these parts are almost always first affected, and the infiltration begins in their muscular coat. Their walls become thickened, their channels narrowed, and on section the vessels remain open, and at the same time assume a compact, translucent appearance, looking like silver cords or threads. Next some of this peculiar substance makes its way directly through the walls of the capillaries into the tissues around, extending into the cells and intercellular tissues, enlarging the former and making them more spherical, destroying their nuclei and displacing their normal contents. These then coalesce, and the whole structure finally presents a peculiar glistening appearance. In short, the disease consists in the infiltration of a material without cells or nuclei, which, of course, appears quite structureless and homogeneous, and at first nearly transparent. The organ affected becomes enlarged, sometimes to a great degree, but without any irregularity in form—

the surface being quite smooth and the margins apt to be rounded; its weight is increased, the specific gravity high, and the whole feels heavy and solid. It may be cut into regular, quite smooth pieces, or even, very thin slices, with sharp, firm margins. The cut surface is dryish, paler than normal, and presents a glistening, quite translucent aspect, being quite smooth, uniform and compact, except when the infiltration is slight or limited to the capillaries, or to certain spots, as is well seen in the so-called sago-spleen, where it is confined to the Malpighian corpuscles. It may also be broken or torn into pieces—its consistence being peculiar, resembling in toughness, resistance and elasticity somewhat that of wax, or of wax and lard combined; hence the names waxy and lardaceous.

It is detected by peculiar chemical reactions; for when a watery solution of iodine is applied, a deep, reddish brown color is produced, and the subsequent addition of a drop of strong sulphuric acid gives rise to a violet or dark blue color. These reactions are rather those of some form of starch or cellulose, and the disease has been called *amyloid* by some; but the view now most commonly adopted is that it is an albuminoid substance, its ultimate analysis showing that it is either a nitrogenous compound, or else a substance deposited in a nitrogenous tissue from which it cannot be separated. Dr. Dickenson supposes it to be a de-alkalized fibrin, or a fibrin which is deprived of its alkali and then deposited in a crude form; and most pathologists agree that it is a direct deposit from the blood, in consequence of some alteration of this fluid. But as this peculiar albuminoid substance has never been detected chemically in the blood, others suppose that it is modified after it escapes from the vessels, or that it is derived from some local degeneration or metamorphosis of albumen, after it has left the capillaries. This latter view is not held in high esteem.

It is almost invariably, but not always, preceded by some disease, which, in the great majority of instances, is attended with long-continued and excessive suppuration, in which it is supposed that the fibrin of the blood becomes imperfect and is poured out as such. It is common in caries and necrosis of the bones, and in lumbar abscess; in chronic pulmonary phthisis, with much purulent expectoration; in chronic empyema; in py-

elitis or other kidney affections; in extensive ulceration of the bowels, and in prolonged ague and tedious malarial influence. It is also seen after syphilis, especially when attended with much suppuration and disease of the bones; and when it follows these, it often begins in the neighboring lymphatic glands, which fact is considered by some as an argument in favor of its local origin in degeneration.

Nutrition is impaired, and the patient is often extremely emaciated, becoming also pale and anæmic, with a peculiar transparency of tissues, or presenting a sallow, waxy look. There may be great debility, with a tendency to syncope, and œdema of the legs may occur from weakness and anæmia.

The treatment is to check suppuration with the mineral acids, tannin, &c. The syrup of the iodide of iron is said to be almost certainly, or at least often attended with considerable benefit if persevered in for some time.

The above is the simplest view of this disease, taken mainly from Roberts' *Theory and Practice of Medicine*. Others compare the infiltration to cerebrin, lecithin and other normal substances of the brain and spinal cord, which are remarkable for their property of swelling up in hot water into a substance resembling starch. Lecithin resembles wax, may be easily melted, and gelatinizes in warm water like cerebrin. But Frey says there appear to be various kinds of lecithin, thus: 1st. *Protophosphorus* is simply a mixture of cerebrin and lecithin; 2d. *Myelin* is a substance of peculiar microscopic appearance, occurring in different parts of the body, especially in those undergoing decomposition; it is tinged slightly brown by iodine, while in concentrated sulphuric acid it becomes of a red, or, at times, violet color. Myelin resembles cerebrin and lecithin in its swelling up into a gelatinous mass in hot water; but it may also be obtained from a mixture of oleic acid and ammonia. *Amyloid* matter is another allied substance, which Frey thinks is a mixed product of the degeneration of many, especially of the glandular portions of the body, causing the so-called waxy or lardaceous degeneration, and which is colored of a peculiarly reddish brown, or brownish violet hue, by a solution of iodine, and which usually turns to violet on the subsequent addition of concentrated sulphuric acid, or more rarely to blue. Finally, thirdly, the *cor-*

pora amylacea of the brain, which vary in their reactions, becoming violet under the action of iodine and sulphuric acid, but frequently blue or blueish with iodine alone; thus resembling starch in one respect and cellulose in another, although not absolutely composed of either. The corpora amylacea are found in the nervous centres of putrefying corpses, in quantity increasing with the advance of putrefaction. They are also met with of considerable size in the prostate gland and the sustentacular connective tissue of the brain and spinal cord may contain them in abundance. Hence some pathologists think that amyloid degeneration arises from the incomplete conversion of starch into sugar and lactic acid.

Other pathologists think that we must look for the origin of albuminoid or amyloid degeneration in some imperfect formation of fibrin, which is a derivative of albumen, and into which it can be resolved by solutions of various alkaline salts, especially the nitrates and carbonates of potash. According to A. Schmidt, *no fluid fibrin* exists at all in the animal fluids as long as they are in motion. It is first generated in the blood and other liquids by the chemical combination of two nearly related compounds, named fibrinogen and fibrino-plastin. The first, also called *metaglobulin*, is dissolved in the plasma of the blood; the second, or *paraglobulin*, which, combining with fibrinogen, converts it into fibrin, exists, on the contrary, in the bodies of the red blood cells, or passes from these into the plasma. Now lymph, chyle, pus, and many tissues containing cells, and also fluids into which these cell-contents have passed, viz.: the serum of the blood, synovia, saliva, &c., are all *fibrino-plastic*; while fibrinogen is also widely distributed through the system, so that it is found in almost all the serous fluids, as well as in those saturating the connective tissue and muscles.

Both of them may be precipitated from dilute solutions by conducting a stream of carbonic acid through them; but both are kept from uniting so as to form fibrin by the rapid mutation of matter which takes place in the moving juices of the body; but on the chemical combination of these two mother-substances, in order to form coagulated fibrin, the alkalies, which previously held them in solution, are set free.

This brings us closely to Dr. Dickinson's theory of de-alka-

lized fibrin as the basis of amyloid degeneration. He found, in tissues affected with it, that the proportion of alkaline salts, as determined in the ash left by incineration, was remarkably diminished, even to the extent of 25 per cent.; while the proportion of lime was somewhat increased. He also found that the affected parts had lost the natural faint alkaline reaction of healthy tissues, and were either neutral or even acid, so as no longer to discharge the color of indigo-solution, but to become stained by it, and thus be as clearly recognized by it as by the iodine reaction. Finally, by treating fibrin with acids, he produced a substance somewhat resembling amyloid material in its reaction, with iodine. But a committee of the London Pathological Society found that livers affected with this degeneration were deficient only in potassium and phosphoric acid, while they furnished an excess of sodium and chlorine. They also found a large proportion of cholesterin, and a generally increased proportion of fat. Jones and Sieveking finally say we do not know in how far the deficiency of alkaline salts is peculiar to the state of waxy degeneration, or whether it does not also occur in other anæmic conditions of the tissues. Still phosphoric acid and potash may be used in addition to tonics and iron, and the iodide of iron, in the treatment of the disease.

ART. III.—*Case of Persistent Priapism, with Remarks.* By M. M. WALKER, M. D., Physician to the Virginia State Prison. (Read before the Richmond Academy of Medicine, December 5th, 1876).

H. Odeneal, negro convict, appeared at sick call July 14th, 1876, holding the penis with both hands, which, if let go, assumed almost a perpendicular position, and was found, upon examination, to be hard, erect, painful and fully distended, except the glands, which did not seem to sympathize with the rest of the organ, but which was in an almost wrinkled condition. He stated that he waked up about the middle of the night, of July 12th, in that condition, and thought he had been dreaming, but did not remember the purport of his dreams. The next day, he used cold water freely, hoping and expecting the penis to subside. The patient was twenty-six years old, of medium height and strong muscular development. He was sentenced by the Pittsylvania County Court, to eighteen years confinement, for the mur-

der of his brother; was adjudged a lunatic, and sent to the "Central Insane Asylum," but after remaining there about twelve months, and exhibiting no symptom of insanity, (this statement is from the Medical Superintendent of the Institution), was returned to the county, and sent to the Penitentiary in October, 1871.

A careful examination revealed no disease of any organ or tissue, nor constitutional trouble of any kind. No tenderness along the spinal column, prostatic enlargement or hæmorrhoids. The bladder was apparently healthy, and although but very little water had been passed since the erection began (and that in drops), it was supposed to be on account of the rigid condition of the penis. The pupils of the eyes, pulse and temperature were natural; the bowels were slightly constipated. In answer to questions, he stated that he had always been healthy, and had never been insane; that he had not been practising masturbation, and had had no venereal disease, but in his own words, had been "bad after women." His room-mates said that he had been in the habit of having intercourse by the anus with a bed-fellow. This he emphatically denied. The man was apparently in perfect health, and there was nothing to treat but the erection. He was admitted into the hospital, and the steward directed to give a dose of castor oil to relieve constipation; twenty grains of the bromide of potassium every two hours, and to apply ointment of belladonna locally. He was also instructed to use the catheter if no urine passed during the morning.

July 15. The steward reported that he had to use the catheter yesterday evening, and again this morning, and that the most flexible rubber instrument passed without the slightest difficulty. The oil had a good effect. The organ was very painful during the night, and the patient slept badly. The penis is as hard and stiff as if it had turned to stone. I immediately put the patient under the influence of chloroform and kept him snoring for half an hour or longer, but without the slightest appreciable effect upon the organ. Bags of ice were then ordered to the spine and penis, bromide of potassium continued, and camphor chloral directed locally at night instead of belladonna ointment.

July 16. The condition of the patient is the same as when I left him yesterday, no good effect from the use of the ice, except some relief from pain during the continuance of the application. Blister directed to the perineum, and a pill composed of camphor gr. v, opium gr. j, ordered *ter die*. Bromide potassium discontinued.

July 17. The penis is still hard and unyielding, but the pain is not so severe. The catheter has been used twice daily since

his admission into the hospital. The dose of camphor is increased to ten grains, and a blister was directed to be applied over the sacrum.

July 18. The patient is considerably prostrated. There is, and has been, during the night, profuse diaphoresis. A few drops of urine passed about one or two o'clock in the night, but the usual quantity was drawn this morning. The organ has not softened in the slightest degree. I had the patient put in a warm bath, and the temperature of the water raised as high as he could bear it, but no relaxing effect was produced upon the organ. A suppository of assafoetida grs. xxx, ext. belladonna gr. ss, was ordered to be introduced night and morning, and a blister applied to the nape of the neck. Camphor and opium pills were discontinued.

July 19. He is still sweating profusely; seems to have fallen off several pounds, and is getting weak. A small quantity of urine was passed in the night while at stool. His pulse is 88, and temperature 102°F. I neglected to state in the beginning that he was put on light diet. The penis is still perfectly rigid. I directed antimonii et potassii tartras gr. ss, to be given every hour until vomiting was produced; that effect of the medicine is to be kept up during the day, and chloral hydrate 3j to be given by enema at bed time. The suppositories were discontinued.

July 20. He passes water very well. Pulse 92; temperature 100°F; no relaxation of the organ. The tartar emetic had the desired effect, and the patient slept through the night, under the influence of the chloral. The steward is instructed to put the patient on the bromide and iodide of potassium and corrosive sublimate—grs. xx of the first, grs. x of the second, and gr. $\frac{1}{32}$ of the third; also chloral hydrate 3ss at bed time every night. All the treatment of yesterday stopped.

July 21. He is delirious this morning, says he is lying on bags of rocks. The organ is as hard as ever. The catheter has to be used again. The pulse and temperature are the same as yesterday.

July 22. The penis is still unyielding, though the patient passed his water well again. Pulse and temperature about normal.

July 23. There is no change in the condition of the organ or patient. The steward is instructed to give fld. ext. ergot 3j. quin. sulph. gr. xv *ter die*, and stop other treatment, except chloral at bed time.

July 24. The dose of quin. sulph. is changed to gr. x.

July 26. The organ seems to be somewhat softer, and the

patient says he is better. All treatment is discontinued except the chloral.

July 28. The penis is very hard and painful this morning—the pain extending to the perineum. The urine has to be drawn again. The pulse and temperature are normal. I ordered Norwood's tincture, gtt. x to be given every three hours until the pulse was reduced to about fifty—the medicine to be stopped or continued as necessary to control the circulation to about that rate, and an ointment composed of equal parts of ext. belladonna and mercurial ointment, to be used locally.

July 31. From the 26th, to this date, the situation is unchanged. I have not been able before to get the steward to carry the medicine to the point desired on account of his timidity. On the 28th, I noticed a hard ring around the cavernous bodies, about the size of a slate pencil, and about two inches below the glans, or slightly above the middle of the organ. I find the effect of the veratrum to be obvious to-day. The pulse is a little below fifty to the minute. The organ is much relaxed, and the patient has passed water well and regularly for the last twenty-four hours. The ring above mentioned is larger.

August 2. The penis is evidently getting better, but the change is very slow, hardly, if at all, perceptible from day to day.

August 10. The improvement is well marked at this date, but in the intervening time, when the medicine has been stopped on one or two occasions, the organ has become hard and painful again. From this time, the treatment is discontinued entirely. The penis is inclined to the right, and if turned in the other direction, will fall back. The ring around the corpora cavernosa has disappeared.

Sept. 30. The patient is discharged from the hospital to-day. For two weeks, the penis has seemed to be of its natural size, and in a normal condition, but until two or three weeks ago, occasionally it has given pain, and the improvement has been very gradual.

I should state, that he said from the beginning, that he had no sexual desire, did not think that sexual intercourse would give him relief, or that he could have a successful connection, and I have no doubt he was correct in his belief. It has now been two months since he was discharged, with the organ, to all appearances, perfectly restored to its normal condition; but I am informed by the man, that although since his recovery, he has frequently felt a strong sexual desire, the organ does not respond, and he fears its functional activity is gone. The case was seen by several of the practising physicians of the city, and to them I am indebted for many suggestions of treatment. Dr. Tompkins

attended the patient with me for some days, and on one or two occasions, the treatment was changed upon his recommendation.

An operation was suggested by Dr. I. H. White, and the time appointed for its performance, but in the mean time, the organ began to subside, and the operation was postponed, and finally abandoned. "Regarding persistent priapism as an extravasation of blood from the venous plexuses into the trabeculæ of the corpora cavernosa, analagous to inflamed piles," he proposed "a subcutaneous incision of the fibrous investment of each corpus cavernosum, throughout its whole length, in order that the coagulated blood might be turned out into the loose connective tissue under the integument, where it could be more readily absorbed, or subsequently removed if necessary, and thus permit a return of blood, through those veins which pass out through the root of the penis, to join the prostatic plexus and pudendal veins." I give his own explanation.

I am satisfied myself that the priapism was not due to any trouble about the brain or spinal column, or to sympathy with any organ or tissue. It was doubtless, purely a local affection, and may well be accounted for upon the supposition of the rupture of vessels, and extravasation of blood into the cavernous bodies, under the strain of a temporary priapism, induced by the effect of a voluptuous dream. The gradual process of absorption would satisfactorily account for the restoration of the organ to its natural size, and the disorganization caused by the rupture of the vessels, prevent the immediate congestion, and consequently the erection of the organ again.

Through the kindness of Dr. L. S. Joynes, and others, I have had access to a large number of books and journals, which have been diligently searched for light on this case. In many of the standard works, no allusion is made to such an affection, and those that mention it at all, do so in a meagre and unsatisfactory way. Four cases were found in the journals, and these have been extensively copied. One was reported in the *Lancet*, of February, 1867, copied in the *Half Yearly Abstract*, for July, of the same year. It is stated in the beginning of this report, that in the records of English surgery, there are only two instances of the complaint. Each corpus cavernosum was pierced in two places, dark grumous blood flowed from the wounds, but

the erection continued for several days and subsided gradually. Suppuration is supposed to have protracted the convalescence. The patient was admitted on the 14th of January, and discharged on the 9th of June. At the close of the report of this case, a synopsis is given of the two cases referred to in the beginning.

In the *Half Yearly Abstract*, July, 1873, there is another case, copied also from the *Lancet*. The treatment in this case was very much the same as in mine. The patient, when admitted on the 28th of September, had been suffering for three or four days. He was discharged on the 11th of November, cured, that is, of the priapism; for I have seen no case where the organ is known or reported to have been restored to its functional vigor. The *Half Yearly Abstract*, January, 1874, contains a third case copied from the *Lancet*. I give the whole report of this case:

"Mr. Johnson Smith places on record the history of a case of priapism, which, after lasting more than four weeks, yielded to an ointment composed of equal parts of extract belladonna and mercurial ointment." The *American Journal of Medical Sciences*, January, 1870, contains the fourth, which is as follows:

Dr. R. B. S. Hargis relates (*New Orleans Medical Journal*, July, 1869), a case of persistent priapism, which was relieved by bromide of potassium, in doses of 15 grains every two hours, given in solution. The patient had a second attack five days subsequently, and was relieved by the same medicine."

Two cases are also mentioned in *Eve's Surgical Cases*; one from the *St. Louis Medical and Surgical Journal*, 1853; the other from the *American Journal of Medical Sciences*, 1842. In the first case, Velpeau performed the operation of puncturing the cavernous bodies through from side to side, with a trocar and canula, which was followed by immediate relief and speedy recovery. In the other case, the erection continued after coitus, attended by an extraordinary degree of voluptuousness. It was treated by bleeding, leeches to the perineum, ice, camphor, and hip baths, and was much relieved at the end of four days, though not entirely well.

Objections have been made to operations which wound the cavernous bodies, on the ground of thereby preventing the erection of the organ forever after. This seems to be the effect of the priapism itself, and the only objection I can see to operations

of the kind is, that such wounds are usually much longer in healing, and more troublesome than the complaint they are intended to relieve.

ART. IV.—*Case of Elephantiasis Arabum, [?] Affecting the Abdominal Walls, With Remarks.* With two Woodcuts. By JOSEPH M. BENEDICT, M. D., Salt Lake City, Utah.

Early in the present year (1876), I was called to attend an old lady in one of the lower wards of this city, whom I found suffering from a disease so unique and so rare that I think an account of it would be of interest to your readers.

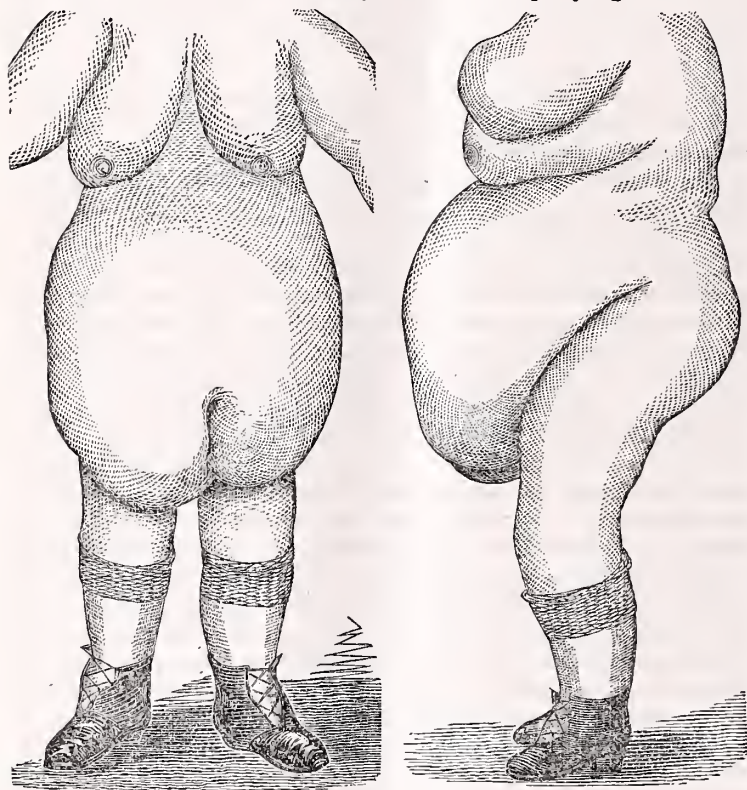
I shall first relate the old lady's history of her trouble, as related to me by her; then describe, as accurately as I can, the case as I saw it, together with the *post mortem* examination which it was our good fortune to obtain.

The patient, Mrs. D., was born in a small town on the coast of England, near Plymouth, in the year 1827, and was consequently 49 years of age. Her father was a sea captain, and a native of Marblehead, Mass.; but upon marrying her mother, who was an English woman, gave up the sea and his native country, and settled near Plymouth, where Mrs. D. and four other children were born. Mrs. D. married at the age of 18, and removed to London, where, at different periods, she had three miscarriages at periods varying from three to five months, but never gave birth to a living child. At this time she weighed about 120 pounds, and, with the exceptions just mentioned, enjoyed the best of health—never having had any severe sickness of any kind. Here her husband died Twenty-one years ago, she removed to this Territory, where she continued to live up to the time of her death. Her father and mother lived to a good old age, and died of some of the ordinary diseases that afflict mankind. They were never troubled with any eruption or skin disease of any kind, nor was such disease known in the family. Her husband died of tuberculosis. We have no history of the remaining members of the family. She had always been a hard-working woman, earning her own livelihood by washing and ironing, and had the pleasure of walking the whole distance across the plains, if pleasure it could be called. There is no evidence of any syphilitic taint in the family whatever, and I was especially careful to trace, if possible, any family or hereditary taint.

Nine years ago, while attempting to replace a section of fence that had been blown down, she was attacked with hæmorrhage from the umbilicus, which, however, was not profuse, but continued at intervals until her death. It was from this that she dated the beginning of her trouble.

When first seen by me, she was sitting in a low chair, which she then occupied the most of the time, owing to a sense of weight and oppression from an immense pendulous mass of tissue in the anterior wall of the abdomen. Upon stripping her, this great mass was seen to hang down over the genitalia, reaching on the right side to the upper border of the patella. That upon the left side was about two inches shorter, and the two pendulous masses were separated in front by a sulcus or groove extending from the umbilicus to the symphysis pubis. The umbilicus was nearly at the most dependent portion, and was at times still discharging a thin, bloody fluid. This ponderous flap was, on an average, twelve inches thick, and apparently solid to a point considerably above the normal position of the umbilicus. The skin was red and mottled, and roughened by sulci and depressions, presenting an exaggerated, hob-nailed appearance. This same peculiarity could be traced over the whole surface of the growth, and down upon the inner and external aspect of each thigh. The hair and sudoriparous follicles were widely separated, measuring in different regions from $\frac{2}{8}$ ths to $\frac{7}{8}$ ths of an inch apart. Her thighs were enlarged by the same hypertrophic condition of the integument and areolar tissue, and were extremely hard to the touch. This was the case with the whole of the abdominal flap (so to speak), and the hardness resembled to the sense of touch that of cartilage more than anything else. It was impossible to pinch up any portion of the skin with the fingers, nor would it even pit upon the firmest pressure. While lying upon her back, the mass could be lifted partially up, and presented the same appearance as upon its anterior aspect. There was no discharge from the surface excepting from the under and posterior portion of the mass, where it was in contact with the groins and thighs, and this seemed to be only an intensified perspiration. Her continued position in a chair with this mass resting upon the knees, caused decided pain and discomfort from its weight, making her feel, as she expressed it, "as if a heavy child were sitting in her lap." Neither could she rest in a recumbent posture, because of the pressure or dragging of this mass, whether lying upon the back or side. The breasts were pendulous, but not hypertrophied, nor did this hypertrophic condition exist in any other portion of the body. The deposit of adipose tissue was large, and, were it not for this peculiar con-

dition of the skin and areola tissue, she might have been looked upon as a simple case of obesity. The accompanying wood cuts



will reveal more fully the peculiarities of this growth than I can tell them.

Her general dimensions were as follows: Weight, 345 lbs.; height, 4 feet 9 inches; circumference of the body at the umbilicus, 58 inches; circumference over nates and tumor, 80 inches; from intraclavicular notch to umbilicus, 23 inches; from umbilicus to pubis, 13 inches; from right to left anterior superior spinous process over tumor, 40 inches; from xiphoid cartilage to Poupart's ligament, right side, 34 inches; from xiphoid cartilage to Poupart's ligament, left side, 28 inches; circumference of arm at insertion of deltoid muscle, 15 inches; circumference of knee over patella, 19 inches; circumference of leg at ankle, 10 inches.

These general measurements suffice to show to what an extent

this hypertrophy reached. During all this time, the natural functions of the body had been normal, and she was not only able to do her own work, but even went out washing. Her menstruation had always been regular and normal in character, and ceased at 44 years of age in the natural way. Slowly and gradually had this increase of tissue been going on, until at last, by its presence and weight, her system gave way, and she paid the debt of nature.

Being absent in New York at the time of her death, I give the result of the *post mortem*, as taken from the notes of Drs. F. D. Benedict and B. G. McPhail.

The patient died suddenly, and without any evidence of pain. A section of the abdominal wall in the median line showed the following thickness by measurement: Over the ensiform cartilage, $3\frac{1}{2}$ inches; at umbilicus, 5 inches; at most dependent portion of tumor, $5\frac{1}{2}$ inches; at symphysis, 3 inches.

This shows the manifest increase of tissue over the whole abdominal region—it being greatest at or about the umbilicus. The integument was thickened and indurated, as was also the *subcutaneous areolar tissue throughout the entire thickness* of the abdominal wall. This induration was so well marked as to require a cartilage knife, with a consequent display of muscular strength, to complete the incision. The cut surfaces where the thickness exceeded three inches presented a marbled or cirrhotic appearance, and a grating sound resembling the cutting of a fibroid growth, accompanied the use of the knife. A longitudinal section of the abdomen gave the same marbled appearance, with an entire fatty degeneration of all the muscular tissue, making a perfectly homogeneous mass of all tissues contained in the anterior wall. There was a slight serous effusion from the cut surfaces, but only enough to show that such was the case. I am sorry that I cannot give the microscopical appearance, which it was impossible to obtain at the time. There was general fatty degeneration of all the organs of the thorax and abdomen. The heart was dilated and hypertrophied, with fatty degeneration of all its substance, but there was no fluid in the pericardium. The lungs were normal to the eye; the liver not enlarged, but adherent and dotted with small points resembling granulations; omentum and mesentery about an inch in thickness; uterus enlarged, covered with fat, and contained two fibroid growths (small)—one interstitial and one sub-peritoneal. The cavity of the abdomen contained a small quantity of fluid. The brain was not examined. There was oedema of the lower extremities, due, no doubt, to this immense growth acting by its weight as an obstruction to the venous circulation.

I have thus described as fully as I can, and at the risk of being considered prolix, the characteristics of this case, and which I believe to be a genuine case of elephantiasis arabum attacking a rare locality, viz.: the walls of the abdomen. Unfortunately, the literature of this trouble is not extensive, and for the reason, no doubt, that such cases are exceedingly rare. Wood, in his *Practice of Medicine*, speaks of it as "being quite peculiar in its character, and as a chronic, indurated swelling of the subcutaneous tissues, with more or less alteration of the skin itself, and great deformity of the part affected." From its ordinary name, Barbadoes Leg, it would follow that the leg was the most frequent seat of the disease, next the scrotum, and next in order the arms, face, neck, female breasts, and lastly the anterior part of the abdominal parietes.

According to Niemeyer, it is a repeated inflammation of the skin, and especially connected with repeated and permanent obstruction of the veins or lymphatics of a part, leading to enormous growth of connective tissue of the skin, subcutaneous and intermuscular substance, and even the periosteum of the bones of the affected part. The skin and adipose tissue are converted into a dense mass semi-cartilaginous in character, resembling bacon. The muscles are atrophied, and are the seat of fatty degeneration, and the veins and lymphatics are often destroyed.

Wilson & Fox on *Diseases of the Skin* give the same description, and all agree as to its general symptoms. Its causation is due, no doubt, to repeated inflammations in the part which subsequently becomes the seat of the disease, and whether it is hereditary or not is uncertain. Climate would seem to have considerable influence upon it, as its frequency is most noted in tropical countries, and Duchassaing (Wood's *Practice of Medicine*, 2d vol.) states that he has known the disease to be arrested, and even to disappear, upon removal to a cold climate. I do not deem it necessary to go further into the subject of this trouble, as its literature is accessible to all, but desire only to present the case as I saw it.

ART. V.—*Case of Hypospadias Cured by Operation. Remarks.*
T. B. WILKERSON, M. D., Young's Cross Roads, N. C.

Charles H., aged 26 years, a wealthy farmer of Charlotte Co., Va., of healthy parentage, consulted me in April, 1876. He had been under the care of several surgeons, among them the late Dr. J. P. Mettauer, of Virginia, without deriving permanent relief. His disease was congenital, and from his earliest recollection he had never been able to pass a stream of urine.

After a careful examination of the penis, I detected two minute orifices, one at the natural outlet of the canal, the other about half an inch back of the corona glandis—a slit-like cleft in the under portion of the organ with everted edges. It required a patient effort of nearly ten minutes to introduce the smallest size pocket probe into either one of these orifices. There was considerable morbid excitability about the parts and the manipulatory efforts on my part brought on frequent spasms of the bladder. As soon as voluntary effort at urination was made, the penis would erect itself, completely closing the minute orifices so that not a drop of urine could escape; but as soon as the attention of the patient was directed to other matters, a discharge of urine commenced to flow guttatum.

After bringing the patient under the influence of chloroform, his limbs being held by assistants, I passed a small grooved probe, about the size of an ordinary sewing needle, in the meatus, through the constricted portion of the urethra extending about an inch in length. I then passed a narrow bladed bistoury down the groove of the probe, and divided the urethra upwards towards the dorsum of the penis, making the incision large enough to admit a No. 11 catheter. The probe and knife were then removed, and a silver catheter was passed into the bladder, which was allowed to remain in ten minutes and was then withdrawn. The urethra was cleared of all blood by the use of the syringe. The catheter was then repassed and secured in the bladder. Having dipped a silver probe of the smallest size into strong nitric acid, it was passed through the fistulous tract on the under surface of the penis, completely cauterizing its surface and the everted edges. The fistula was then accurately closed by a small piece of tissue paper saturated in collodion, and an extra layer of collodion was put on after the first had dried. The catheter remained in the bladder four days, when it was removed and introduced every morning for two weeks.

The fistulous orifice closed entirely. The patient has had no trouble in passing a full stream of water. There has been no

tendency in the urethra to contract—an unfortunate result so often noticed in these cases.

Hypospadias has been subjected to various plans of treatment. Amongst the most prominent are paring the edges of the fistula and causing their union by sutures, caustics, and galvano-caustics; but any plan of treatment in the hands of the most skillful surgeon will sometimes fail. One point particularly necessary for a successful termination is to have a non-irritable urethra—one that will bear well the retention of a catheter—for the fistulous tract can be much more accurately closed over a firm resisting rod than it can without, and the catheter prevents any urine from passing over or entering the abnormal opening.

In selecting the caustic, use that one which will prove sufficiently powerful to destroy the pyogenic membrane along the fistulous tract, and at the same time not produce any undue excitement in the urethra. In cases of this kind, nitric acid is highly to be lauded. It will seldom fall to the lot of any surgeon to meet with a urethra so nearly obliterated as in the case I have just reported. All voluntary efforts, before the operation, to empty the bladder failed. The constant trickling away of the fluid had produced so much irritation and excoriation as to render life a burden, and had caused such an offensive odor as to render his presence exceedingly disagreeable, and denied him the blessings of a matrimonial life. To witness the frantic efforts of the patient during micturition, and to see stamped on his countenance the furrowed marks of care-worn suffering, was heart-rending in the extreme.

Clinical Reports.

A Woman without Uterus or Appendages. Verified by Autopsy.
By J. L. CUNNINGHAM, M. D., Hempstead, Texas.

On the 19th day of October, 1876, I was called to see Mrs. H., in consultation with Dr. Robert C. Watson of this place. I learned from the doctor, that he had been in attendance on the case about two weeks, and that there had been no threatening symptoms until within the last 24 or 36 hours. To-day, however, I find her with a pulse ranging from 124 to 130. Skin

dry and parched. Pressure over the abdomen elicits pain, particularly in the hypogastric and inguinal regions. Bowels inclined to diarrhoea. When spoken to, she appears rational, but as soon as she is let alone, she commences to expound scripture, talking incessantly on this theme. Does not sleep. Is very nervous and fidgety. In response to my inquiry as to the condition of her sexual system, I was informed by her husband that she had never menstruated, to his knowledge. This statement she corroborated, saying that she had never menstruated. Suspecting that her troubles were in some way connected with uterine derangement, I suggested the propriety of instituting an examination, for the purpose of clearing up this point.

Both she and her husband consenting, I had the bed pulled before the window, and an ironing board, covered with a blanket, slipped under the sheet. She was placed on her back, on the ironing board, the nates being near the edge of the bed, the thighs well flexed on the pelvis, and the shoulders a little elevated so as to relax the abdominal muscles. I introduced the index finger of the right hand, into the vagina, and carefully explored the same, bringing the left hand, pressed on the abdomen, to the assistance of the right, by making conjoined manipulation. I was greatly surprised to find that the vagina terminated in a short *cul-de-sac*. I then explored the rectum with the finger, but could feel nothing corresponding to a uterus. In order that there might be no mistake, I introduced a Simpson sound into the bladder, as far back as it would go, and holding this in my right hand, introduced my left index finger into the rectum, and bringing this finger into contact with the sound, in the bladder, traced the sound as far as my finger in the rectum could reach—nothing intervening between them to correspond with a uterus. Nor could I, after the most diligent search, discover either ovaries or ligaments. I then had her turned on the left side, breast prone position, and introduced Sim's speculum. Nothing could be seen but a shallow *cul-de-sac*, about $2\frac{1}{2}$ or 3 inches deep. Dr. Watson then went over the whole ground, and verified my statement in every respect.

In about two weeks from this examination, Mrs. H. died; and I obtained the consent of her husband to make a *post mortem* examination, Dr. Watson and Mr. H. being present. I made an incision in the abdominal walls, beginning at the pubes, extending upwards through the linea alba above the umbilicus, and another at right angles to this one, an inch and a half below the umbilicus. Having removed the intestines, I carefully sought for the uterus, but could find nothing corresponding to it. I introduced the index finger of the right hand into the vagina, and

placed the left hand within the pelvic basin, and brought them in direct contact—there being an interval between them of not more than one-fourth of an inch. By careful inspection, there could not be discovered the least trace of uterus, ovaries or ligaments.

Mrs. H. was of medium size, with black hair, sallow complexion, large bones, but small hands and feet. She had rather a masculine appearance, but no beard or moustache. The mammary glands were undeveloped, and there was but little adipose tissue over the pubis; neither was there found the usual hirsute covering of this region—the parts resembling more those of a little girl than of a matured woman. Shortly after I had made the vaginal examination, she told me that she had been aware that she was not right, and importuned me to operate on her, and make her like other women. She said that when she was first grown up, a doctor had examined her for some uterine trouble, and advised her to marry, and she would come all right after awhile.

She was about thirty years of age; had been married twice, and had lived harmoniously with both husbands.

Salicylic Acid in the Treatment of Acute Rheumatism. Report of a Case. By J. D. ROBERTS, M. D., Mt. Olive, Wayne County, N. C.

Acute rheumatism being one of the self-limited disease, we would hardly be justifiable in placing too much reliance on any one remedy. It is our duty, however, to use such remedies as will shorten the duration of the disease, or alleviate the sufferings of our patients. I propose simply to report a case of acute rheumatism, treated with salicylic acid, as I have it recorded in my case book.

D. W. K., of the town-police, is a large, well formed, muscular man, æt. 30, unmarried, and is usually very healthy. For three or four days he complained of soreness in his joints, and a feeling of general lassitude. He said he had taken cold and wanted a prescription for it.

R. Quinine sulphonat.....gr. viij.

Pulvis opi et ipecgr. x.

S. Take at bed-time; also take a warm foot bath.

Jan. 1, 1877. Was called very early to see him this morning. Found him in much pain. Left knee swollen, red, and tender—

almost immovable on account of pain; a tendency to draw or flex leg on thigh. But little if any fever.

R. Wine of colchicum, ten drops, three times daily.

R. Fluid ext. pokeroot.....fʒij.

Aquafʒij.

Bi carb. potass.....ʒij.

M. S. Teaspoonful every four hours. Bathe part affected with a volatile liniment, and wrap in warm flannel. Solution morphine to relieve pain and produce sleep.

No change in afternoon.

Jan. 2. Had good night's rest, and was refreshed. No pain in left knee, except when moved; knee still much inflamed; right knee also inflamed, and very painful. Complains that the left hip joint is sore, but there is no inflammation about it. He has some fever this morning. Tongue very dry and a little coated. Has had no operation on bowels for three days. Ordered citrate magnesia. Continued same treatment. *Afternoon:* Symptoms much aggravated. Both knees, and also muscles of calf of leg painful. Prescribed salicylic acid grs. viij every six hours through the day, but none at night. Ordered quinine, grs. vj, at bedtime. Discontinued the bi carb. potassa.

Jan. 3. Rested well forepart of night, but waking up and finding morphine solution frozen, he became very nervous and restless; still he expresses himself as better. Knees still inflamed, but not near so painful. Left ankle quite painful. Has no use of lower extremities, but they are painless when unmoved. Continued same treatment, and added salts and sulphur to move bowels. *Afternoon:* Suffering great pain in left wrist, and some in right shoulder. Salicylic acid increased to grs. x at a dose.

Jan. 4. Found patient suffering much. Is afraid to move any part except head. Left wrist and right shoulder inflamed, and very painful. Knees and ankle not swollen so bad, but painful when moved. Can stand on his feet when helped up. Passed a restless night and is very despondent. Bowels acted this morning. Decided to give the acid one more day's trial. *Afternoon:* Knees, ankles, wrist, and shoulder are easy when he is still, but second joint of right thumb is giving him excruciating pain.

Jan. 5. Both shoulders sore, as also is the thumb. Can use his lower extremities very well, though his left hip gives him some pain. Continued same treatment.

Jan. 6. Complains of acid making him perspire too freely, commencing about ten minutes after he has taken it, and lasting nearly an hour. Reduced the acid to twenty grains per day. Thinks he is improving, as no other joints are affected as yet.

All the affected joints better. As the stomach could not retain quinine in powder, gave him $1\frac{1}{2}$ gr. quinine pill every four hours.

Jan. 7 to 10. Improvement under same treatment is gradual but slow. Is able to walk about the house, and move all his limbs with ease.

Jan. 11. Patient discharged as convalescent to-day. Has had no relapse, and has resumed his duties as policeman.

There has been no heart symptoms throughout the case. I regret my inability to give the daily temperature, as my thermometer was broken sometime before. Appetite was not as good as usual, though he relished some food.

The acid was suspended in glycerine, being *well* rubbed up in a mortar. More recently, Dr. G. M. Roberts, and Dr. S. B. Flowers, of this place, have been trying some experiments as to the solution of salicylic acid, and find the following the best for febrile cases: R. Soda bi carb., salicylic acid $\frac{aa}{aa}$ ʒijss; aqua, sweet spts. nitr., $\frac{aa}{aa}$ fʒij. Will not the soda in this form, render the acid neutral?

Phymosis, with Reflex Irritation, Causing Symptoms Simulating Stone in Bladder. By F. T. BROOKE, M. D., Cuckoo, Louisa County, Va.

Dr. Taylor's report (page 618, in November number, 1876, of *Monthly*) of his case of "Phymosis, with Reflex Irritation, and Symptoms Simulating Stone in the Bladder," reminded me of a case that had been under my charge, and on referring to my case-book, I find the following notes:

October 5, 1875. David J., æt. six years. Parents both living and healthy, though they have lost several children from various diseases, and one to my knowledge, from encephaloid sarcoma. David is reported to have enjoyed fair health, till within the last six weeks, when he commenced to "break out," and in a short time thereafter, complained of difficult urination, pain in the head of his penis, lost his appetite, and had sleepless nights. Was constantly handling his penis, a habit which his mother said had made the parts very sore. I found him suffering from an eruption, resembling ecthyma, in addition to very decided symptoms of stone in the bladder. His bowels were very much constipated, and irritative fever was imminent, if its initial stage had not already commenced. On examining the glans penis, I found the prepuce adherent to within a few lines of the meatus, though very little elongated. As I was not prepared to

sound his bladder, I determined to reduce the phymosis; which being done, revealed a terribly ulcerated glans. I directed his mother to apply several times a day, carbolic soap (Colgate's), and tepid water to the parts. Ordered also a brisk purgative, to be followed by iron and quinine in tonic doses—intending to sound his bladder on the 8th.

Oct. 8. Found the patient much better in every respect. Tonics continued, and, in addition, iodide potass, grs. iij *ter die*. Failing to get assistance, deferred sounding till the 11th.

Oct. 11. Nearly every symptom of stone has disappeared; urination natural or nearly so; sleeps well, and suffers no pain. The ulcerated glans and the wound in the prepuce healing kindly. No fever, and good appetite. Gave up all idea of sounding.

Oct. 15. Patient still improving. Instead of iodide potass, substituted Fowler's solution, gtt. ij *ter die*, to be increased one drop daily. After this he continued to do well, and by November 10th was entirely cured.

The symptoms of stone were evidently the result of reflex irritation.

Nov. 14, 1876. He has never been sick since.

Correspondence.

Medicinal Properties of the Buffalo Lithia Springs of Mecklenburg County, Va.*

Mr. Editor,—The remarkable medicinal properties of these waters should be more generally known to the members of the profession in every part of the country.

These Springs belong to that rare class of mineral waters which, without any very sensible qualities, to distinguish them from ordinary water, yet exert a quiet and mysterious influence over the animal economy, which, in many cases, is as wonderful as it is gratifying. There is nothing in the analysis of the water which exists in quantity sufficient to account for its peculiar action. The remark applies more forcibly to this class than

*This valuable practical article, from one of the most eminent of the profession in Virginia, should have been placed under the head of *Original Communications*. It was promised for this number, but its late receipt compels us to place it under the head of *Correspondence*. Dr. Houston formerly practised in Wheeling, West Virginia; afterwards in this city; and more recently was Physician to Randolph Macon College, Ashland, Va., which position he resigned some months ago on account of failing health. He is well known to the profession of this section as the contributor of many valuable articles in former years to several medical journals. His ripe experience and careful record of facts entitle anything from his pen to consideration.—EDITOR.

to most mineral waters. It may be said, however, of all mineral waters, that analysis can never reveal the combinations upon which their efficacy depend. In fact, the very process of analysis may break up combinations, formed in the laboratory of nature, which the best skill of the chemist can never detect, and which may impart to them their most valuable properties.

Having had an opportunity of watching very closely the action of the Lithia Water, in numerous cases which have fallen under my observation, I am prepared to impute to it one quality at least, to which, it strikes me, sufficient attention has not been heretofore directed. I allude especially to its power as a gentle excitant to the nervous system, and as a *powerful and permanent nerve tonic*. To this peculiar property I am disposed to attribute much of its efficacy in the relief of many chronic diseases. Other mineral waters with exhilarating properties, are sparkling in their appearance, and their exciting qualities are due to the gases which are disengaged, and which are, consequently, evanescent in their effect. The Lithia Water is without such impregnation of gases, and its effects are much more permanent.

In a case under my immediate observation, in which there was congestion of the mucous membrane of the fauces, œsophagus, and probably of the stomach, accompanied by extensive and very painful hyperæsthesia of the whole skin, its effects were very remarkable. A full goblet of the water of Spring No. 2, taken about eleven o'clock, was followed, in a few minutes, by a sensation described as a *lightening up of the whole system*, as though a load had been removed from it, and an almost entire cessation of numerous neuralgic pains in different parts of the body. There was none of that exhilaration of the brain caused by alcohol in any of its preparations, or by any other mineral water that had ever been tried. The result was manifested too soon to be accounted for on any other supposition than that it acted directly on the nerve filaments of the stomach, and through them, by reflex action, on every other part of the system.

It may be remarked here that hyperæsthesia generally, may result from two opposite conditions of the nerve centres: one of active, and the other of passive congestion. Active congestion

or inflammation is attended with exaltation of nervous sensibility; whilst passive congestion is the result of depressed nervous energy, with *perverted* sensibility. When not the result of organic disease, a large majority of the disorders of the digestive organs are caused or accompanied by the latter condition; and it is to its immediate effects upon this perverted sensibility that I am disposed to attribute, to a great extent, the salutary effects of the water. Its direct impression on the nerves of the stomach is the first important link in the chain which connects it with the gradual improvement produced in the other organs of the body—and this improvement is rendered permanent by its nerve tonic power. This peculiar property of the water would seem to indicate it as peculiarly applicable to those forms of paralysis caused by pressure upon the cord, from passive congestion or serous effusion. In this class of cases all remedies, including galvanism, are, more or less, necessarily tentative, but I have no hesitation in advising its use, especially in cases of long standing.

Add to this nervine power its impregnation with alkaline salts, and you have a combination especially adapted to the relief of that large class of disorders of the digestive organs, accompanied with passive congestion of the mucous membrane, with perverted sensibility; or, as they were graphically described, about fifty years ago, by the celebrated Dr. James Johnson, under the head of “Morbid Sensibility of the Stomach and Bowels.”

The impression made upon the nerve filaments is communicated, by contiguity, to the blood vessels in their immediate neighborhood, and the organic contractility thus acquired, relieves them gradually of their accumulated contents; whilst, by reflex action, the same effect is produced, more gradually, on the mucous membrane in every part of the body; the appetite is improved and, with it, the power of digesting the contents of the stomach. Its direct action on the liver is probably very limited. The functional disorders of this much slandered organ are due, in a large majority of cases, to irritation and inflammation of the duodenal mucous membrane, conveyed by direct sympathy, through the gall ducts, to the body of the organ. The cause being removed, the liver returns gradually to the

performance of its proper functions, and adds its healthy products to the completion of digestion.

Its effects in improving and restoring the organic sensibility of the entire intestinal track, were strikingly illustrated in one of the cases under my immediate observation, in which there was almost entire paralysis of the rectum. The rectum itself was distended into a sac, in which fecal accumulations took place to an extent that rendered it necessary to use mechanical means for their removal. Under a continuous use of the water, the sensibility was restored, to a considerable extent; tonic contraction of the distended bowel took place, and its contents were expelled, with very slight assistance, from the use of simple water. Indeed, as far as any cathartic effects are concerned, they are due more to this restoration of organic sensibility along the whole track of the intestinal canal, than to any drastic effect upon the blood vessels.

As an alterative and diuretic, its composition would indicate it as peculiarly appropriate. By reflex action it operates, in the same manner, on the irritated mucous membrane of the bladder, though more slowly than it does when applied directly to the mucous membrane of the stomach and intestines. A single case brought to my attention will serve to illustrate this principle. A gentleman, far advanced in years, labored under an irritation and inflammation of the neck of the bladder, so extreme as to render it necessary for him to make efforts to relieve it from twelve to twenty times during the night. Under the use of the water the relief was so complete as to render it necessary for him to rise only once, and often not at all during the night. As far as known, the relief thus afforded has been permanent.

The foregoing remarks on the *modus operandi* of the water are derived mainly from observations made with the use of the bottled water from Spring No. 2. It can scarcely be doubted that they will apply with more force to the use of the water at the fountain head.

Spring No. 3, if it contains the same nerve tonic as Spring No. 2, has also an increased quantity of iron which would constitute it a valuable blood, as well as nerve tonic, in those numerous anæmic conditions usually met with in female diseases.

It is not to be expected that in organic disease of any kind, and especially in those of a malignant character, a cure can be effected; but it may be safely said that in many, even of such cases, it will be found a most valuable palliative.

What has already been said will designate, to every intelligent physician, its useful applicability to a variety of other affections which need not now be enumerated. In this connection it will be proper to enter a caution against the too free use of the water under any circumstances. Being highly medicinal, it should, like all other important medicines, be administered, as far as practicable, under the advice of some judicious physician, who, from observation, has become familiar with its properties. If taken too freely, like all water, it will produce some sense of oppression of the stomach; and, moreover, a sense of constriction about the head, which is neither comfortable nor desirable. From all that has been said, I must conclude that, as a medicinal agent, this water has properties which render it quite equal, if not superior, to any mineral water of which I have any knowledge.

M. H. HOUSTON, M. D.

Ammonia in Bronchial and Lung Troubles.*

Dear Doctor,—* * * * * The article in your January number, 1877, by Dr. Wharton (*How to Cure a Bad Cold*), although short, is valuable, as it teaches a fact in regard to carbonate of ammonia in antagonizing hyperinosis that ought to be known and appreciated by all physicians.

I claim some originality in the use of ammonia and other alkalies in the treatment of pneumonia, acute bronchitis, and common catarrhal affections. I have been employing alkalies of various kinds in catarrhal affections since 1846, and carbonate of ammonia as the leading remedial agent in pneumonia since 1862—the use of the medicines in these cases being forced upon me by the exigencies of war. While the First Mississippi Regiment was encamped on Brazos Island in 1846, though the weather was hot enough, the men suffered from “bad colds,”

* We take the liberty of making this extract from a private letter because the subject matter seems to us to be of general interest.—EDITOR.

and there being no medical stores in reach, I improvised a cough syrup that acted like a charm. New Orleans molasses and bicarbonate of soda apparently constituted a rather unscientific formula which gained me favorable notice at headquarters, and lead to my elevation from the position of a private to the charge of a hospital in Mattamoras. Since then I have seldom failed to employ the alkaline treatment in the acute stage of colds.

The ammonia treatment of pneumonitis was forced upon me when I was Brigade Surgeon of Maxey's Brigade, while encamped at Port Hudson during the late war. Thirteen cases of pneumonia were presented for treatment, and the only medicine at my command that was likely to prove beneficial, was carbonate of ammonia. I was astonished to find that the improvement in all the cases was very marked and decided from large doses of the ammonia—from five to ten grains every two hours, in a quarter of a glass of water. In 1870 I published an article in the *American Journal of Medical Sciences*, on Carbonate of Ammonia in Pneumonitis, in which I advocated its use in the doses mentioned from the first day of treatment until the cure was complete. I supposed this to have been the introduction of a plan of treatment that has since become very general and highly successful.

Of course I am well aware that the ammonia has long been used in the advanced stages of the disease, mainly for its supposed stimulant power. Dr. Flint advocated its use to prevent embolism, but I was the first to advise it in the early stages as a means of overcoming the controlling element of danger in the disease—hyperinosis. I regret that there are still large numbers of physicians who fail to properly esteem the extraordinary powers of this medicine in pneumonia. With the exception of blisters, which I employ in the first stage, I use little else in that formidable disease but carbonate of ammonia. Opiates and quinine are sometimes indicated and given; but calomel, tartar emetic, squills, or any other depressing medicine, are never given in any case of pneumonia that comes under my care.

Truly yours,

A. PATTON, M. D.

Vincennes, Ind.

Chloride of Lead as a Deodorizer.

Mr. Editor,—If it will be of any advantage to others, I will add my testimony to the efficacy of the “chloride of lead” as a deodorizer. In those cases that I have tried it lately (one so horribly offensive—suppuration of the feet from “frost-bite”—that you could hardly stay in the room), it has acted instantaneously and purified the whole room. In accouchment cases, I have laved the parts with a little of the fluid, and have been astonished at its purifying effects. For particulars, see *Braithwaite's Retrospect*, July No., 1876, page 49.

“To prepare it for use, take, for ordinary purposes, half a drachm of nitrate of lead, dissolve it in a pint or more of boiling water, and dissolve two drachms of common salt (chloride of sodium) in a pail or bucket of water; pour the two solutions together, and allow the sediment to subside; the clear, supernatant fluid will be a saturated solution of chloride of lead. A cloth dipped in this solution, and hung up in a room, will sweeten a fetid atmosphere instantaneously.”

W. H. MACON, M. D.

Old Church P. O., Va., Dec. 19th, 1876.

Original Translations.

Translations from the German and French.

The Treatment of Phagedenic Ulcers.—Dr. Weisflog (*Virchow's Archiv.* 26 Band., 3 Heft.) recommends for phagedenic ulcers the galvanic bath for the relief of pain. His manner of using it is as follows: One of the electrodes of an induction apparatus at its minimum of intensity is connected with the bottom of the vessel containing the warm water for the bath. When the wound is immersed, the patient takes the other electrode in his hand, and places at first the tip of one finger on the sponge. As soon as he finds he can bear an increased current, he places another finger on the sponge, and thus, by placing his fingers on the electrodes or removing them from it, he can regulate the strength of the current at his will. When the immersion of the wound itself into the bath is from any cause not practised, the nerves supplying the part can be directly faradized in the following manner: A sponge electrode is brushed lightly over the

region of these nerves, while the patient regulates the strength of the current according to his own sensations. In the intervals between the applications of electricity, the usual treatment is to be pursued. The pain at first rapidly returns after each faradization, so that the patients are generally, during the first part of the treatment, compelled to resort frequently to the electricity for relief. The intensity of the pain gradually diminishes, however, and the painless intervals become longer, till, generally in from eight to ten days, the sensibility of the ulcers is like that of the surrounding skin. The *appearance* of the ulcer, however, is not altered. At this stage, he recommends an ointment of nitrate of mercury in the proportion of one part of the salt to fifty or sixty of lard or cerate. If pains in the bones are present at the same time, he recommends the use of the nitrate of mercury by hypodermic injection at intervals of *fourteen days*. (!) The more frequent use, he says, is liable to cause salivation, which is not necessary. His formula for subcutaneous injection is as follows: Crystals of nitrate of mercury, one part; distilled water, one hundred parts. The dose is not mentioned.

The Local Treatment of Puerperal Fever.—A paper on the above-mentioned subject was read by Dr. Fritsch before the 49 Naturforscher-Versammlung für Hamburg, and published in a late number of the *Allg. Wiener Med. Zeitung*. From it we extract the following:

The speaker thought that numerous investigations and accumulated experience had placed the value of local treatment in puerperal fever beyond all question. The most important point now is to determine the best mode of applying it.

Even in the most severe cases, he thought, treatment should not be neglected, for recoveries had occurred even when all the symptoms of septicæmia were present. He recommends the injection into the uterus of two or three litres ($3\frac{1}{2}$ to 4 pints) of a two or three per cent solution of carbolic acid, or salicylic acid, if it be preferred. When the vagina is large, a part of the disinfecting fluid remains behind. This is sufficient to act as an antidote to the fluids secreted before the next injection. The temperature of the water should be 25°R . (about 88°F .).

After one thorough cleansing, the irrigation of the uterus should only be practised about three times in the twenty-four hours. The vagina should be washed out more frequently, and, indeed, even after three or four days when the irrigation of the uterus can be dispensed with, that of the vagina should be continued.

Under this treatment, the ulcerations of the mucous membrane of the vagina and the little fissures in the vulva will rap-

idly heal; the lochia will diminish, and the wounds will rapidly heal. The vulva will retain its normal form, and the turning in of the hairs will be avoided. Dr. F. further stated that under this mode of treatment involution of the uterus progresses in a most satisfactory manner. In conclusion, he urged that internal treatment be employed at the same time, and warned his hearers against the use of salicylate of soda, which, he states, causes a mild delirium.

In the discussion which ensued, Prof. Schatz, of Rostock, said that he should fear to use the injection with much force, and advised that great care should be taken to allow the free discharge of water from the uterus.

Dr. Fehling, of Leipzig, spoke favorably of the action of salicylic acid, and also recommended, in place of the catheter open at both ends, the "common uterine tube."

Dr. Bandl, of Vienna, recommended the double current catheter.

Dr. Schroeder, of Berlin, used the common glass tube about the size of the finger, as recommended by Hildebrandt. These are very cheap, easily obtained, and may be destroyed after use (so as not to cause infection).

A New Method of Treatment of Strictures of the Urethra.

M. Le Fort read a paper on this subject before the Académie de Médecine on the 7th of November last, an abstract of which we find in *Le Progrès Médical* for November 11th.

He states that he has employed this method of treatment for seven years, with the most favorable results. It consists in placing in the urethra a bougie, which is allowed to remain for twenty-four hours. This causes a softening of the stricture from slight inflammation, and renders the tissues much more distensible. To the bougie is attached a metallic piece, into which a No. 1 conical catheter, having a diameter at its largest part of three millimetres, is secured. The catheter carrying the bougie in front of it as a guide to prevent a false passage, is easily introduced into the stricture, the dilatation of which is thus commenced. Catheter No. 1 is now withdrawn and a No. 2 is introduced, which has a diameter of five millimetres at its largest part. It is passed into the stricture in the same manner, and then withdrawn, and replaced by one having a diameter of nearly seven millimetres. Thus, he states, at a single sitting a very small stricture can be completely dilated, even when its walls are quite resistant. M. Le Fort says the operation is very easy, and there is no danger whatever of making a false passage. There is so little pain that anæsthesia is unnecessary, and there is generally no bleeding at all, or else only a few drops appear

at the meatus. During the seven years, M. Le Fort has seen no accidents, except a slight urethral fever, which has always been easily controlled by sulphate of quinia. As in all other methods of treatment, catheterism has to be practised frequently afterwards for some time, to prevent a recurrence of the stricture.

[This method of treatment, while it cannot be considered *new*, has had but little attention paid to it, and is worthy of consideration from the high standing of M. Le Fort.—TRANSLATOR.]

The Treatment of Eczema.—In a late number of *Le Progrès Médical*, we find the report of a clinical lecture delivered by M. Hardy at the Saint Louis Hospital, on the treatment of dartrous affections. We propose to make a brief abstract of it, feeling confident it will be of general interest.

There are three distinct stages in the course of an attack of eczema. In the first period, the inflammatory phenomena predominate. Emollients and antiphlogistics are then indicated in the form of tepid lotions. An infusion of flaxseed or of the marsh mallow, or baths of water containing bran, are very serviceable, but poultices are to be avoided, as they are liable to cause rupture of the vesicles. In the impetiginous form of eczema, however, when the rupture of the vesicles is inevitable, poultices of rice or potatoes are of service; but flaxseed poultices should never be used, as they ferment rapidly, and may thus increase the irritation. When the discharge is not very abundant, a powder of starch, rice, arrow root, or subnitrate of bismuth is recommended. The internal medication during this stage is confined to the use of cooling drinks, such as barley water, lemonade or hop tea. Cold air and all sources of irritation should, of course, be avoided. In the second stage of eczema, when there is tolerably free secretion, M. Hardy has found a mild purgative of service—such, for example, as senna. Pullna, Frederickshall, Morimbad or Kissingen water he also recommends, and nitrate of potash as a diuretic. As local remedies, he employs lotions of marsh mallow infusions and mildly astringent applications, such as an infusion of melilot, or a feeble solution of borax. Poultices of rice or potatoes are especially useful in this stage. When it is possible, M. Hardy recommends that the parts be covered with vulcanized india rubber, and states that healing rapidly takes place when they are thus covered—a view in which various other writers on skin diseases concur. Ointments or applications of glycerin are rarely indicated, except occasionally, to protect the exposed parts from the action of cold air or other irritants.

The substitution method, in which a very acute irritation is

suddenly produced, is sometimes followed by permanent benefit. Thus, in impetigo of the face and scalp, the application of tincture of iodine, diluted with alcohol, is frequently of decided benefit. Sometimes, in very rebellious cases, a solution of nitrate of silver has acted well.

In the last stage of eczema, when the inflammation and discharge have ceased, M. Hardy recommends an ointment composed of cold cream (about) 450 grains; citrine ointment (about) 30 grains; camphor (about) $\frac{1}{15}$ grain.

It should not be forgotten that eczema, whether local or general, is a manifestation of the dartrous diathesis, and on this account M. Hardy recommends the use of arsenic, which, he says, is of the greatest benefit.

Gastrotomy for Non-Malignant Stricture of the Œsophagus.

M. Verneuil reported a case of this kind terminating favorably to the Académie de Médecine, on the 24th of October last. This is the first successful case on record, and we believe the operation has been performed seventeen times.

[A brief history of all the sixteen cases prior to this one is given in the Reports of the Clinical Society of London for 1872.—TRANSLATOR.]

M. Verneuil's patient, a young man, aged about 17 years, swallowed some caustic potash in February, 1876. This gave rise to œsophageal stricture and gradual emaciation and loss of strength, in consequence of the inability to take food. The operation was performed on the 24th of July last. All the instruments were dipped in a solution of carbolic acid, one part to twenty, and chloroform was administered.

Incision was made parallel with the cartilages of the left ribs, extending, consequently, downwards and outwards, and about two inches in length. The skin, the subcutaneous cellular tissue, and the muscles, were successively divided. The peritoneum was then reached, which was raised with a pair of forceps, and cut with the scissors. The stomach then came into view, was caught by the forceps and raised up into the external wound, to the edges of which it was then attached by acupuncture needles. The walls of the stomach were then connected with the external opening by fourteen metallic sutures, each one of which passed through the peritoneum also. The needles were now removed, and an incision made into the anterior walls of the stomach. A large caoutchouc tube was fastened in the opening so as to project at one end *into* the stomach, while the other hung out. The incision into the walls of the stomach caused considerable hæmorrhage, which was checked by torsion of the vessels and pressure. Finally, an application of colodion was made over the whole abdomen.

No accident supervened on the operation, the ligatures came away of themselves, and the result was a complete success. The patient was nourished by injecting food through the caoutchouc tube. His sense of taste was, of course, lost, but his appetite was excellent.

Proceedings of Societies.

PROCEEDINGS OF MOBILE MEDICAL SOCIETY.

(Reported by Dr. W. D. Bizzell.)

Typhoid Fever—Effects of Large Doses of Quinine.—*January 27.*—Dr. Fournier had seen a case of continued fever lasting twenty-one days—all the sensorial and enteric symptoms corresponding to typhoid. When admitted to the City Hospital, which was some time after the ascertained commencement of the disease, he exhibited all these symptoms, together with a dry and red tongue. Guided by this latter symptom, he gave the ordinary turpentine emulsion, with good effect. The usual range of temperature was from 102° in the morning to 104° in the evening. The only special point in the treatment to which he wished to call special attention, was the effect of large doses of quinine. When he gave 20 grs. in the morning, the evening temperature was half a degree lower than when no quinine was given. The pulse, which was quite remarkable, did not, at any time, go above 85 per minute.

Dr. Cochran wished to know if Dr. Fournier had examined the case closely for the presence of the lenticular rose colored spots?

Dr. Fournier said that the person being colored, he did not find any spots.

Dr. Cochran said, though he had never seen the eruption characteristic of typhoid on a colored person, he thought that the eruption produced such effects on the skin as that even in a colored person it might be detected. He had lately read a clinical lecture by Dr. Loomis, of New York city, who claims that the spots in typhoid are not only a characteristic of the disease, but, ordinarily speaking, are invariably characteristic; and that he would as soon expect to find a case of small-pox or scarlatina not exhibiting the characteristic eruption of these diseases as a case of typhoid fever without the lenticular rose-colored spots. Dr. Cochran said this coincided with his experience, and was the opinion he long had held. However, his experience with the disease was acquired many years since in the northern portion of the State of Mississippi, for he had not

seen a case of what he could call typhoid fever in Mobile or anywhere else since 1863.

Dr. Ketchum mentioned a case which he had lately treated, exhibiting the course and all the symptoms of typhoid, with the exception of the lenticular spots. If such fevers were not typhoid, he did not know what else to call them. The only types of fevers in this Southern country with which typhoid is apt to be confounded, are those due to some form of malarial intoxication; but even this could not be, if we carefully studied the respective clinical history of the two diseases.

TYPHOID FEVER.

Prodromata always present.
Purgatives do harm.
Purplish flush of the skin.
No very distinct remission.
Duration, 14, 21, 28, 35 days.
Not aborted by quinine.
Extreme prostration.

MALARIAL FEVER.

No prodromata.
Purgatives do good.
Red flush.
Remission distinct.
Duration, 7 and 9 days.
Aborted by quinine.
Prostration not marked.

He had no experience in the treatment of typhoid with large doses of quinine for its antipyretic effect; he had never given quinine in typhoid, except in the earliest stages, to combat congestive tendencies, or in small doses during the stage of convalescence as a tonic.

Dr. Reese said that his experience with large doses of quinine in the treatment of a large number of cases of typhoid which had come under his observation many years since in Central Alabama, was not favorable. He had given it in doses of gr. xxx or more, without any good effect, but with what he considered a decidedly bad effect, as he then observed it—increasing the head symptoms and augmenting all the nervous perturbations.

Dr. Fournier remarked, and justly, that the large doses of quinine which were given during the early stages during the period mentioned by Dr. Reese, were given for the purpose of cutting short—aborting the disease. This was the method so earnestly advocated by the late Dr. Fenner, of New Orleans, and was not used to control the temperature nor for its antipyretic effect, but with another idea and for another purpose altogether.

In reply to the question from Dr. Cochran, Dr. Ketchum said that he had frequently seen cases of typhoid in Mobile exhibiting, in perfection, the characteristic eruption; in fact, just as well marked as any case he had ever met in the hospitals of the North. The presence of the spots was not the invariable rule in the cases he had met in the course of a long practice in

Mobile—not even in a majority of what he considered undoubted typhoid cases.

Dr. W. H. Anderson, in the last four months, had treated four cases of typhoid fever in Mobile, one of which was exceedingly tedious, lasting thirty-five days. Three of the cases, all white, were in the same house. In one case the characteristic eruption was well marked, while in the other two cases it was absent, although every other symptom was equally well marked. He remembered that during a four years' residence in Paris, when a student many years since, he must have seen several thousand cases of typhoid fever, and it was the rarest thing to find a case not exhibiting the eruption; but in this Southern country his experience coincided with that of Dr. Ketchum. In one of the cases mentioned above, Dr. Anderson said that paralysis of the muscles concerned in deglutition came on, and on account of its interfering with the nutrition of the patient, gave considerable alarm; he considered it due to congestion at the base of the brain, as intense headache was at the same time complained of.

Fracture of Skull—Expectant Plan—Trepine—Death.—

Dr. Fournier had seen a case of contused and punctured wound of the scalp and cranium just over the right parietal bone. When admitted into the hospital there was no pain complained of, and no fever. When questioned, the patient said that he had been shot; but subsequent inquiry proved that he had been struck over the head with a gun, and that the hammer had penetrated the skull, producing the before-mentioned wound. Having lately read a paper wherein such cases were very successfully treated on the expectant plan, as there were no decided symptoms calling for interference, he concluded to await developments. Gradually, however, fever and other bad symptoms developed, and to-day—the sixth since the injury—as all the symptoms were worse, Dr. Heustis trephined in the presence of the class of medical students, removing several splinters of bone—the result of a comminuted fracture of the inner table of the skull. How it would terminate he could not tell.

N. B.—This patient died on the third day after the operation.

Depressed Fracture of Skull—Recovery Without Trepine.

Dr. D. E. Smith reported the case of a young man who was struck by what was supposed to be a picket, just over the frontal bone. When he saw him there was a large swelling. In a day or two he punctured this and let out the effused blood. He then discovered a fracture of the skull with quarter of an inch depression of a fragment about one inch in length by half an inch in width. The wound was treated on general principles

and healed readily, when it was found that the depressed portion of bone had again assumed the general level so that no depression could be found.

Dr. Bizzell inquired if the doctor was quite sure that it was not a wound of the pericranium with raised and thickened edges?

Dr. Smith said that he was quite sure that it was a depressed fragment of bone.

MICHIGAN STATE BOARD OF HEALTH.

(Reported* by Secretary, Dr. Henry B. Baker, Lansing, Mich.)

The Board held its regular quarterly meeting in Lansing, January 9th, 1877.

Professor R. C. Kedzie, from Committee on Poisons, Explosives, etc., presented a report on the **Quality of Illuminating Oils in Use in Michigan**. He thinks the people of Michigan are to be congratulated upon the present condition of their illuminating oils so far as exemption from life and property are concerned. The public prints are not now filled with recitals of deplorable accidents resulting from the use of kerosene. But notwithstanding this security from accidents, much of the oil now supplied burns poorly, the wick gums and chars, and the light flickers and goes out. The refiners claim these to be the necessary results of the high standard required by the Michigan law, and they state that if we will lower our standard to 110° for the flash test, all these evils will disappear, and we shall be still safe from accidents. Misled by these statements, the people are petitioning the Legislature to alter or abolish the present law.

In order to arrive at an intelligent conclusion, Dr. Kedzie, by the advice of the Board, visited Cleveland in order to examine the methods of refining the crude petroleum to make illuminating oils. His investigations established the following facts: That to manufacture good oil which will stand the test required by the Michigan law for inspection, requires either extra care and expense in refining, or it takes what is called the "heart of the run." This is done in the case of what is known as "Water White" Oil, which is transparent, burns with a clear, bright light, and does not become opalescent by exposure to a temperature of 32°F . But to dispose of the inflammable products and still furnish an oil which will stand the Michigan test, the refiners run into the low-test oil the waxy and tarry products, paraffine, etc., which are not readily combustible and

* Manifold copies of the proceedings of the meetings of the Board are sent to those journals which exchange with the Library of the State Board.—EDITOR.

which raise the standard of the low-test oils, rendering them capable of standing the test, but of poor quality for lighting purposes. The presence of a large amount of paraffine has a tendency to gum up the wick and render it incapable of supplying oil to the flame. Dr. Kedzie found that the "Water White Extra" would flow through ninety-three millimetres of tube containing wicking and run freely, while the "Michigan test," or the oil that contains so much paraffine, would flow through only seven millimetres.

The action of sunlight upon oil spoils its burning qualities. It develops in the oil a quantity of tarry matter. Two specimens of oil, drawn from the same barrel, one of which had been exposed to the light for a few weeks, and the other kept in an opaque bottle, were exhibited. The one exposed to the light was decidedly yellow and clouded, while the other was still white and transparent. Dr. Kedzie recommended the use of broad, shallow lamps, which would make but little demand upon the capillary power, and contain only enough oil to be burned in one evening.

The remedy is emphatically not an abolition of the system of inspection required by the present Michigan law. When a lamp, quietly burning, explodes like a bomb-shell and scatters death and destruction broadcast, as was once the case, can we afford to entertain the notion of lowering the standard test? If the test could be extended to ascertain the amount of paraffine present, and rejecting such oil as contains it in amounts which impede the capillary action of the wick or render the oil hard or waxy in cold weather, it might do very much towards removing the difficulties of which the people complain. The best test which he could now propose for this was: The oil should remain clear when its temperature was reduced to 32°F .

Mr. Perry Averill, State Inspector of Illuminating Oils, read a report relative to the progress he had made in establishing an efficient and uniform system of inspection, the number of barrels of oil inspected, the number rejected, etc. He said that the petition praying for a reduction of the test to 120° , which has been so widely circulated throughout the State, and which is now pouring into the Legislature from many localities, originated with the Standard Oil Company of Cleveland, and has been sent throughout the State by its agents. He thought the law should be changed so as to provide for a uniform *flash test* which should be branded on the barrel instead of the burning point as now.

After a long discussion of this subject by the members of the Board, the following resolutions were adopted:

Resolved, That the great reduction, since the present system

of State inspection of illuminating oils has been in force, in the number of casualties from lamp explosions and otherwise through the use of low grade illuminating oils, is an indication of the value of such inspection, and of the present test.

Resolved, That a committee (of which Dr. R. C. Kedzie shall be chairman) be appointed by the chair, to take such steps as circumstances may require, to furnish the Legislature with any information in the possession of the Board regarding the workings of the law for the inspection of illuminating oils in this State, and to act for the Board in maintaining the present standard of inspection so far as regards the flash test.

Rev. Mr. Brigham reported upon a subject previously referred to him, namely: the **Sanitary Influence of the Eucalyptus Globulus**; or, Blue Gum tree. He read letters from persons who had studied the habits of the tree, including one from Dr. Asa Gray, who thought the tree could not be made to thrive in Michigan on account of the severity of the climate. Dr. Lyster said the trees were growing in Detroit; that by being cut back they had become somewhat hardened. He recounted instances in which the tree had been planted in certain insalubrious regions in Africa, where they had a remarkable beneficial sanitary influence.

Dr. O. Marshall, of Lansing, presented, through the Secretary, a communication on **Opium and Morphine Eating**. He gave facts concerning twenty-five cases which had come under his observation. He thought the evil was increasing, and that measures should be taken, not only to assist those who are already victims, but to prevent others from acquiring the habit; and he believed this to be a proper field of labor for the State Board of Health. Of the twenty-five cases reported, nine use morphine; fifteen use opium, and one uses both. Dr. Marshall thought a law regulating the sale of these drugs was needed, and might prove effectual. He especially urged the prohibition of the sale of soothing syrups, cordials and anodynes, which are preparations of opium and morphine in disguise, and which create in the infant a predisposition to the opium habit in the adult. The author was requested to prepare a paper on the subject for publication in the next Annual Report of the Board.

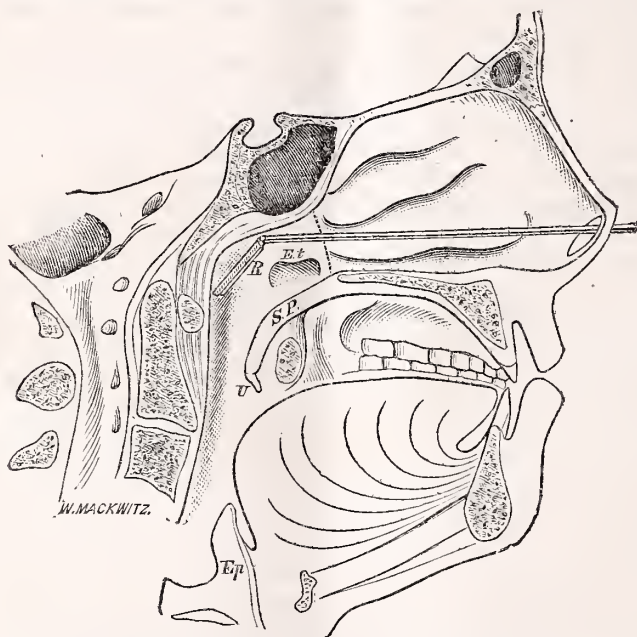
Dr. Milton Chace, of Otsego, submitted to the Board a proposed bill relative to the qualification of physicians who practice in Michigan. It provided for furnishing to the people information relative to the professional study of those who practice medicine in Michigan, such information being furnished by means of sworn statements filed with the County Clerk in the county where the physician practices.

The Secretary's report states the number of local Boards of Health in this State to be about twelve hundred.

The next regular meeting of the Board will be held on April 10th, 1877.

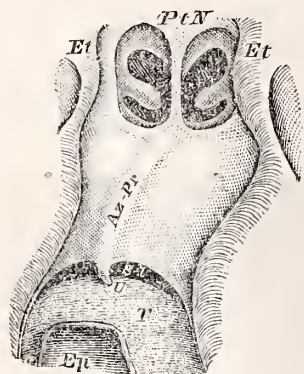
Analyses, Selections, &c.

Functions of the Uvula, and the Prominence Formed by the Azygos Uvulæ Muscles.—Dr. Thomas F. Rumbold, of St. Louis, in 1870 (*St. Louis Med. & Surg. Jour.*, Dec., 1876), had a patient whose right nostril admitted the whole length of his little finger. He took advantage of the opportunity to inspect the motions of the uvula during mastication, deglutition and vocalization. He kept the nostril wide open with a Kramer bivalve speculum; through this large canal, he passed a reflector to the posterior wall of the pharyngo-nasal cavity. (Fig. 1.) On



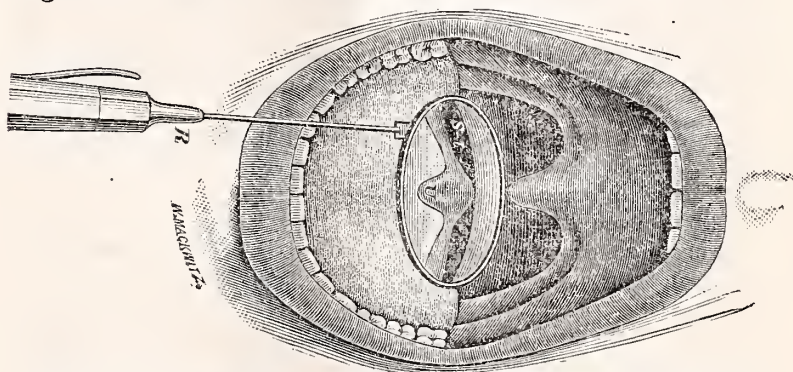
[FIG. 1. Antero-posterior section of the head; R., reflector; S. P., soft palate; U., uvula; E. t., mouth of Eustachian tube; Ep., epiglottis.]

the mirror, a calcium light was directed, thus enabling him to inspect the upper or posterior surface of the soft palate, the ridge or prominence on it formed by azygos uvulæ (Fig. 2, Az. Pr.), the base of the tongue, epiglottis, and contents of the lar-



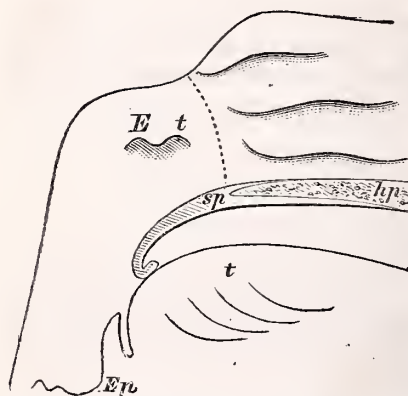
[FIG. 2 View of the posterior nasal passages, the posterior surface of the soft palate and base of the tongue; Pt N., posterior nares; E. t., Eustachian tubes; Az. Pr., azygos prominence, on the upper surface of the soft palate formed by the azygos uvulæ muscles; S-l, Semi-lunar openings formed by the tongue, uvula and soft palate; T., base of tongue; Ep., epiglottis; U. uvula.]

ynx during attempted phonation of the sound, "æ," with the mouth closed. Observations were continued on this patient for about five weeks. Subsequently, he made numerous observations on six patients (about 75 inspections in all) who had lost the septum nasi, but who had perfect soft palates. The following are the results:



[FIG. 3. The image seen on the hinged reflector (R), of the lower edge of the soft palate and the lower or posterior concave surface of the uvula (U), showing also the higher semi-lunar-shaped openings (S-l) made by the azygos prominence touching the posterior wall of the pharynx.]

During mastication, the whole free border of the soft palate rested on the base of the tongue, reaching within a short distance of the epiglottis. In five of the cases, the uvula was not in sight at any time, but seemed to be doubled under the velum so as to lie between it and the tongue. (Fig. 4.) Two patients



[Fig. 4. Antero-posterior section of the hard palate (hp) and the soft palate (sp), showing the position of the uvula resting on the base of the tongue (t); Ep., epiglottis; E. t., mouth of Eustachian tube.]

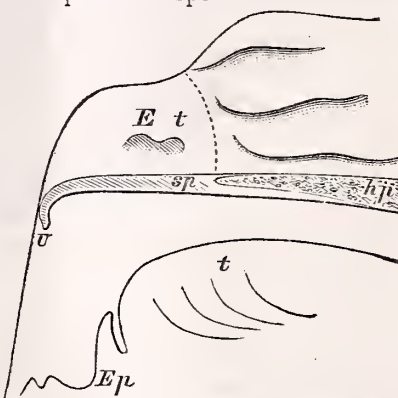
upper surface of the velum was high enough to cover and close both Eustachian tubes, pushing the reflector upward and forward. Then the velum descended as the bolus was swallowed, until its lower border touched the base of the tongue.

During vocalization, the azygos prominence, if not of more importance, is of as much importance as the uvula itself. When sounds passed through the nose alone, the whole free border of the soft palate rested on the base of the tongue (Fig. 4), the uvula not being in sight at any time. When sounds passed through the mouth alone, the soft palate was raised, and about 4''' of its lower border was pressed against the posterior wall of the pharynx (Fig. 5). From repeated inspections while the velum was in each of these two positions, it appeared that all the sounds were uttered without the aid of either the uvula or the azygos prominence.

While phonation sounds were required to pass through the mouth and the nose at the same time (the most favorable opportunity for observing what assistance is rendered by the azygos prominence and the uvula), the soft palate was either suspended,

had elongated uvulæ, which sometimes hung down on the base of the tongue, and frequently touched the epiglottis. The uvula was always contracted, as evidenced by the increased height of the azygos prominence, formed by the contracted azygos uvulæ.

During deglutition, the soft palate was pushed back by the alimentary bolus until the posterior wall of the pharynx was reached. The motion was continued in an upward direction until the



[Fig. 5. Antero-posterior section of the hard palate (hp) and the soft palate (sp), showing the position of the velum closing the avenue to the pharyngo-nasal cavity; U., uvula; t., tongue; Ep., epiglottis.]

uvula rested on the base of the tongue (Fig. 6), or it was raised to such a height that the azygos prominence touched the posterior wall of the pharynx. (Fig. 3.) In each situation occupied by the velum, the communications between the fauces and the mouth, and between the fauces and the pharyngo-nasal cavity was divided into two nearly equal semi-lunar openings. In the first named position, the division was made by the uvula and a small part of the central portion of the velum rested on the base of the tongue (Fig. 6, S-I); and in the second position, the partition was made by the azygos prominence (Fig 3, S-I)

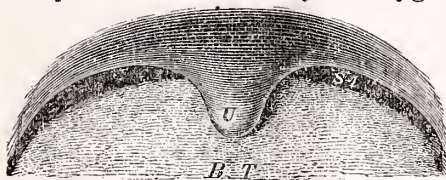


Fig. 6. View of the anterior surface of the soft palate, the uvula and the base of the tongue, showing the lower semi-lunar-shaped openings (S-I) formed by the uvula (U) and a part of the central portion of the velum resting on the base of the tongue (B. T.).

touching the posterior wall of the pharynx. In one portion, on several occasions, the uvula seemed to be resting on the base of the tongue, while at the same time, the azygos prominence was touching the posterior wall of the pharynx.

The formation of the inferior or posterior surface of the uvula (Fig. 3, U), as well as the peculiar position in which it hangs from the velum (Figs. 1 and 2, U), indicate that this surface lies on the base of the tongue frequently, its extremity being directed forward (Fig. 4). It is evident that this position is the best one in which it could be placed, to prevent the free edge of the soft palate from being shaken by the force of the air from the lungs.

It was observed repeatedly, that the free border of the velum was not at any time suspended in the current of air during vocalization, but was always supported, thus preventing it from being thrown into vibrations by expirations. To show how the support was given: This vocal valve was either elevated and pressed against the posterior wall of the pharynx (Fig. 5, U) during the phonation of sounds that passed through the mouth alone; or, removed from this wall a small distance, but not so far as to prevent the azygos prominence from touching it, (seen in the image on the reflector, Fig. 3, R), for sounds that passed mostly through the mouth and a little through the pharyngo-nasal cavity; or, lowered to allow the uvula and a small part of the central portion of the velum to rest on the base of the tongue (Fig. 6), for sounds that passed mostly through the nose and a little through the mouth; or, still lower, so that its whole free border rested on the base of the tongue (Fig. 4), for the formation of sounds that passed through the nose alone. In a few instan c

he has seen the second and third positions combined, *i. e.*, the uvula resting on the base of the tongue, and the azygos prominence touching the posterior wall of the pharynx at the same time (Figs. 6 and 3).

From the effect of these positions of the velum on phonation, it would appear that one of its functions is to act as a valve, by directing the voice from the larynx into the mouth alone for the formation of one kind of tone; into the nose alone for another; and to divide the sound so as to allow it to escape from both of these openings, for still others. It is evident that while the velum is resting wholly on the base of the tongue, or is pressed against the posterior wall of the pharynx, the liability for its free border to vibrate by the force of the air is reduced to a minimum; but when this valve is in either position that requires it to divide the sound between the mouth and the nose, then, on account of its free edge being suspended and placed immediately in the current of air from the larynx, the liability for it to vibrate is increased to a maximum.

A provision is necessary to prevent these vibrations. This provision, he believes, is found in the uvula and azygos prominence formed by the azygos uvulæ muscles. It is located in the centre of this very mobile palate or valve, and by its support in both of the positions that require suspension (Figs. 3 and 4), prevents it from being shaken by the force of the current of air from the lungs. If there were no uvula and azygos prominence to prevent this thin edge of suspended flesh from vibrating, it would be shaken to such a degree as to impart a tremulousness to the tone of all sounds forcibly uttered that pass through the mouth and nose at the same time.

Excision of the uvula can affect those sounds only which are formed by its assistance, and not then even, if they are pronounced with the usual strength of voice, because the contact of the central portion of the velum on the base of the tongue will be support enough to prevent the velum from being shaken; therefore, the difficulty in pronouncing, in high and loud tones, those sounds that are required to pass mostly through the nose and a little through the mouth, will be in proportion to the amount of loss of support that the velum suffers; as usual excisions leave a stump of the uvula and the central portion of the soft palate, these will prevent any vibration during speech made with the *usual* force of the lungs.

A patient who has just had excised an elongated and hypertrophied uvula, may talk immediately in an *ordinary* tone with greater ease than before the operation; but, just as soon as he utters words with *more* than the *usual* force of voice, some of

the efforts, though not causing as much pain as the knife did, will cause so much that he will be compelled to cut his sentence short. The reason of this effect on the uvula appears to be this: The heavy uvula had given so much support to the soft palate that, although it had been acting as an impediment to all kinds of sounds, the velum required very little of its own pressure on the base of the tongue (Fig. 6) to prevent it from being thrown into motion by the air from the larynx; but when the superabundant portion of the uvula was removed, the velum required greater pressure upon the base of the tongue to prevent these vibrations, and this pressure occasioned pain. Of course the loss of the whole of the uvula does not interfere with the formation of the two semilunar-shaped openings by the free border of the velum and the dorsum of the tongue (Fig. 6), by which the voice is allowed to escape from the mouth, and thus provide for perfect vocalization; it takes away a *part only* of the support from the soft palate. Even if there be no stump left by the excision, the tongue will learn to overcome the defect by the increased elevation of its dorsum, which may be made more convex than was required to form the two semilunar openings than when the whole of the uvula was present, and in this way allow both a greater pressure and more of the central portion of the velum to rest on the tongue. But if the soft palate suffer so much of a loss of substance in its central portion, that its concavity is equal to the convexity of the dorsum of the tongue, thereby preventing the formation of the semilunar-shaped openings, and neutralizing all support, there will be some sounds, such as pass mostly through the pharyngo-nasal cavity and a little through the mouth, given imperfectly in spite of all efforts to overcome it, because the proper tone requires that the velum should be raised to allow a part of the sound to pass to the mouth; and this act of elevation exposes it to the force of the air from the larynx, which force is the cause of the imperfection of the sounds, by causing the unsupported edge to vibrate. Again, if the loss in the center of the velum be greater than can be closed by the greatest convexity of the dorsum of the tongue, the disability will be equal to that caused by a perforation of the soft palate, and in addition, there will be a tremulousness to many semi-nasal tones, on loud speaking. That the intermittent tone is occasioned by the vibrations of the central portion of the velum, is evidenced by the pain in this part after lengthy speaking in a loud voice. This pain was experienced by two patients whose soft palates were notched to this extent by ulceration.

In answer to the question—how to account for the improvement of the voice after the removal of the uvula?—It may be

asked if this improvement in speech is equal to the patient's vocalization at the time that his uvula was in a healthy condition? The answer to this question should be given in the negative. That a relative improvement in speech does follow an excision of an elongated or hypertrophied uvula, there can be no doubt, because this operation brings the organ nearer to its normal size and condition; but such improvement can never equal the normal function of the organ. This being the case, the effect of the excision will be to remove the cause of a mechanical hindrance to every word uttered by the patient, made in any degree of force, and it will leave a stump which will cause an inability to pronounce some words on forced vocalization only, and this even will be overcome in time by the dorsum of the tongue becoming more convex. Therefore, to admit that the removal of a uvula thus diseased may improve the ability to speak in the usual tone of voice, does not prove that it was the uvula's removal that was the origin of the improvement; for, if such were the case, the excision of the healthy uvula would not only be advisable, but desirable.

The effect of the amputation of the whole of the uvula, besides its being a loss of the greater part of the support to the velum, prevents the formation of the azygos prominence to its greatest height. This height of the prominence is required to prevent, by its contact with the posterior wall of the pharynx, the vibrations of the velum during the formation of many semi-nasal sounds.

Influence of the Heart in Uterine Affections.—Dr. Theo. H. Jewett, of South Berwick, Me., (*Proceedings Maine Medical Assn.*, 1876), being surprised at the non-recognition in the text-books of the intimate relation of the uterus and heart in both functional and organic affections, contributes a paper on the subject. He claims priority, in "the definite recognition of the fact that many of the most intractable affections of the uterus are associated with abnormal nervous or organic conditions of the heart as causative influences, and that the remedies are beneficially operative upon the mal-conditions of the uterus by improving the cardiac action."

"The uterus receives its nerves from the renal and hypogastric plexuses. Those from the first source follow the course of the ovarian arteries, and are distributed to the fundus and superior region of the uterus. Those from the second follow that of the uterine arteries, and present very nearly the same distribution, dividing into superficial and deep-seated branches." *Dubois*.

"The hypogastric plexuses are principally formed by branches

of the sympathetic, but they also contain nerves issuing from the sacral plexuses. Thus are explained the numerous sympathetic reactions on the various functions of organic life, and on the brain and spinal cord, which are exhibited in uterine diseases." Thus the connection of the heart also with the uterus, our point in question. The uterus is also supplied by vaso-motor nerves.

The rational symptoms, apparent both in affections of the heart and uterus, clearly show the intimate sympathy of these two organs. It is seen in abnormal cardiac innervation; also in the organic affections. Palpitation in excited or feeble hearts, syncope and syncopal convulsions, intermittent pulse, cold feet and hands, or the opposite, and like states of the head, are often associated with uterine affections as cause and effect.

As to the hysterical form of disordered heart, we need not dwell upon its associations, causes or consequences, as far as the uterus is concerned. All this is too well known for us to consider at length. One thing is sure—the heart is disturbed, is irregular, so that the patient chokes and is nearly suffocated at times. This state adds to the nervous disorder of the uterus, also to that of its vascular system, engorging it and obstructing the return of its venous blood. All this should be met by nervines, tonics and appropriate treatment.

We have not unfrequently another form of disordered innervation of the heart, or that due to debility or loss of vigor of the cardiac nerves themselves. We often notice in these cases very irregular action of the heart, sometimes a thready and intermittent pulse, complicated with a congested uterus and the bad symptoms which usually attend such a condition. The head is at such times severely affected, often with delirium, congestion and pain, and the general circulation much embarrassed. A sensation of profound sinking in the region of the heart, attended by much suffering, is a common symptom. Sometimes we have all the apparent symptoms of organic disease of the heart, and for the time being the *effects*, with syncope and often angina pectoris; but when relieved, the heart is perfectly regular as to rhythm and beat, and the most experienced auscultator cannot perceive a sign of heart trouble.

This functional mal-innervation of the cardiac nerves and bad action of the heart embarrass the return of the venous blood from the organs of the pelvis and abdomen. The effects are damaging in various directions, to the organs below as well as to the head and organs above. We have a stasis of blood in the uterus, with prolonged floodings at menstrual periods, and sometimes, under fright or great excitement, intervals of the periods.

Here the cerebro-spinal centers and the sympathetic are associated with the cardiac mal-innervation. Often women are unwell every week; sometimes they flow every fortnight, and sometimes all the time. As a consequence of this tumid state of the uterus, we have cervical granulations; also granulations of the uterine cavity; sometimes polypi, sometimes fibrous tumors and various neoplasms, erosions and ulcerations of the os uteri, prolapsus and leucorrhœa, sometimes, indeed, carcinoma. The erosions return after local treatment. The tumid cervix and uterus are not permanently benefited by leeching or scarification. The tumid, congested state continues, cathartics leave no permanently satisfactory results; granulations after granulations return, and a fungoid degeneration of the uterine mucous membrane is set up, which neither the curette nor caustics will extinguish. Just as long as the disordered state of the heart continues, just so long is the patient in affliction. Menorrhagia and other results of an over congested uterus continue.

It may, perhaps, be said that we have here an organic disease of the heart present. Such is not always the fact, for many of these patients recover, and the heart then shows no indications of heart trouble. Some of these cases, however, may, if neglected, lapse into organic disease. In the class referred to, we have, Dr. J. believes, simply a peculiar lesion of cardiac innervation *in situ*—an idiopathic nerve lesion of the ganglia lying in its inmost structure. This lesion must be attended to, and not the uterus wholly, or our patient sinks to a low moribund condition, from menorrhagia and other troubles with their reactions upon the system at large, and sometimes the woman loses her life.

In these cases, the best treatment is the use of the bromide of ammonium in doses of from ten to twenty grains thrice daily, as a tonic and anodyne, kept up for weeks, and sometimes for months, followed, after a time, by Fowler's solution of arsenic, or alternated therewith. The iodide of potassium may occasionally be associated with the bromide of ammonium. The latter may be used not only in the interval, but during the menstrual period itself. This treatment quiets and regulates the heart in a most satisfactory manner, and the uterine troubles, as a consequence, vanish. *Cannabis indica* is of much use in this class of affections, giving the heart balance in action, and thus lessening uterine congestion. *Nux vomica* is also of service in supplying and reinforcing the sensory and motive power coming from the spinal cord. Terror, which paralyses the heart, and fear, which sinks its energy, and undue anxiety, which depresses, should be avoided; while hope, which enlivens and sus-

tains, and perfect satisfaction as to the feelings, which cheers, should be encouraged and secured as far as lies in our power.

We now come to the organic affections of the heart as bearing upon uterine congestion. Insufficiency of the tricuspid valves, or of the mitral valves with stenosis, with all their tergal effects upon the lungs and right heart; also dilatation of the right heart, from whatever causes—all these abnormal cardiac conditions lead to fullness of the portal circulation, and to plethora and a tumid condition of the uterus. The effect is, as it were, almost wholly mechanical, causing a delay of return of the venous blood and engorgement of the uterus and appendages, more particularly where other usual causes co-exist. Indeed, the liver, kidneys and other abdominal organs are also affected, thus complicating the case. Such patients often suffer severely at the menopause with excessive floodings.

The treatment applicable to the heart in these cases, is the rational use of digitalis, to give tone to the debilitated organ and improve its action. In some cases it may be associated with iron, when marked by much anæmia, and with veratrum viride in cases characterized by very great irritability. Fowler's solution may follow as a heart tonic. Other organs, as the liver and kidneys, should receive attention.

Such local attention to the uterus as the cases may require, as the removal of polypi and the like, should not be neglected. It may be said that all these remedies now mentioned have again and again been made use of. Such has been the case. Indeed, what has not been blindly prescribed? They have not, however, been employed with any intelligent idea, but simply empirically, as are many other remedies, with perhaps a notion of their action as astringents, which, in the strict sense of the word, they are not.

Glycerine Applications to the Head for Hydrocephalus.—Dr. A. N. Read, of Norwalk, O. (*Trans. Ohio Med. Soc.*, 1876), reports three cases in which he applied glycerine for the cure of hydrocephalus.

Case I., 1869.—Child eighteen months old; head twenty-four inches in circumference; sutures separated, and bulging of integuments. He applied twice daily to the head glycerine, with a little tincture of iodine, and directed the use of a close-fitting cap. The application caused the child "to sweat dreadfully." This suggested that the glycerine, because of its strong affinity for water, had caused an exudation of serum, which, if continued, might cure the child—a hope strengthened by remembering the drain following its application to indurations of the

uterus. After a year's use, the child was cured. In 1874, [he?] was attending school, with fair intellect and good health.

Dr. Mervel, of Monroeville, O., has reported the result of a partial trial in one case. Child under one year old; head circumference, twenty-two inches; eyes much protruded; as well as integuments over separated sutures. Applications of glycerine were followed by profuse serous flow. In three weeks the eyes were restored to their natural position, and there was no protrusion between cranial sutures; but the head was not reduced in size.

Case III.—Advised glycerine without seeing patient; age less than one year old; head very large. Had many convulsions. Discharge same as in other cases. No more convulsions, but child died in a few weeks. The weather was very hot, and the head became sore while using the glycerine, which may have been impure.

Medico-Legal Examinations in Cases of Suspected Mania Transitoria.—Dr. Eugene Grissom, Superintendent of the Insane Asylum, Raleigh, N. C., in concluding a most valuable and interesting paper on *Mania Transitoria*, read before the Session (1876) of the Medical Society of North Carolina, advises that under doubtful circumstances:

1. Examine thoroughly the history of the family of the accused for nervous disease of any character, and especially for the insane neuroses.

2. Search the past life of the individual himself for any indications of chronic but concealed insanity.

3. *Especially, ascertain if there is not evidence of larvated epilepsy, by a rigid symptomatic test.*

4. And further, investigate the possible occurrence of any traumatic injury capable of giving rise to cerebral irritation of obscure character; and likewise to examine narrowly his record as regards physical views of every character.

[We regret, exceedingly, that we have not space for a more full abstract of this intensely interesting paper.—ED.]

Book Notices, &c.

The Medical Men of the Revolution, with a Brief History of the Medical Department of the Continental Army. By J. M. TONER, M. D., Philadelphia, 1876.

It can scarcely be necessary to say to the readers of an American medical journal that there is no other man in the ranks of

the profession so competent as Dr. Toner to do justice to the subject selected by him for his address before the Alumni Association of Jefferson Medical College—an account, namely, of the services rendered during our long struggle for independence by the medical men of that period. In his investigations, with a view to bring to light every hidden store of knowledge which can be made to contribute to American medical biography, his industry and zeal know no bounds. He will scrutinize entire libraries of historical works in order to glean a fact here and there which might not be found elsewhere, and does all this so carefully and critically that his knowledge will be found to be as accurate as it is copious. He moreover assimilates it all into a consistent whole, which he narrates with graphic power.

We were not prepared to hear that medical men had played so prominent a part in the great struggle that “tried men’s souls.” “The names of physicians,” says Dr. Toner, “are everywhere conspicuous among the patriots and efficient promoters of the cause of liberty. There was scarcely an office, civil or military, that at some time a physician did not fill; no dangers which they did not participate in; and no duty or responsibility that they did not discharge with credit to their country and honor to their profession.” In another part of the address he had said, “In this connection I would fain make an effort to rescue from that oblivion which time remorselessly throws over all human actions the names of those patriots of the revolutionary period belonging to our profession whose biographies have not yet been written, in order to preserve and perpetuate their memory and their noble deeds. * * * * I aim not to eulogize, but to collect material and present a few facts from which history may be written.”

If the shades of these true patriots could revisit the scenes of their earthly labors and recognize the hand which has piously assumed the grateful task of rescuing their deeds from oblivion, we can fancy their taking up the words of the divorced Queen of Henry VIII, and saying:

“After my death I wish no other herald,
No other speaker of my living actions,
To keep mine honor from corruption,
But such an honest chronicler as Griffithh.”

In these pious efforts to preserve and perpetuate the memory of the medical worthies of a past generation, Dr. Toner reminds us of the self-denying labors of “Old Mortality” as detailed in the opening chapter of Scott’s immortal story, where the pious old Cameronian is described as being found in the most lonely recesses of the mountains busied in cleaning the moss from the

grey stones, renewing with his chisel the half-defaced inscriptions, and repairing the emblems of death with which the simple monuments over the graves of the slaughtered Whigs were usually adorned. "He considered himself as fulfilling a sacred duty, while renewing to the eyes of posterity the decaying emblems of the zeal and sufferings of their forefathers, and thereby trimming, as it were, the beacon light, which was to warn future generations to defend their religion even unto blood."

Dr. Toner's researches have resulted in bringing to light a fact which is a matter of just pride to the profession of which they were members, namely, that the medical men of the period were among the first to rally to the cause of liberty and to serve their country in posts of responsibility and danger before the outbreak of war, and the regular organization of armies demanded their special services as physicians and surgeons. Thus the news of the march of the British troops on Concord was conveyed to the inhabitants by Dr. Samuel Prescott, who narrowly escaped being taken prisoner. Dr. John Brooks, afterwards Governor of Massachusetts, was a practising physician in Reading, where he commanded a company of militia, which he promptly assembled and gallantly led against the enemy. He was subsequently (May 27, 1775) appointed Major in Bridges' regiment, and was active in entrenching Breed's Hill on the night preceding the battle of Bunker Hill. On the reorganization of the army in 1776, he was made colonel of a regiment and assisted in fortifying Dorchester Height. His command was distinguished for good service and gallant conduct throughout the war. After peace was declared he resumed the practice of medicine, but served occasionally in the legislature and was a member of the convention for adopting the Federal Constitution. His life as a physician and a citizen shed lustre upon his State and the nation.

Then there was Dr. Joseph Warren, who a General Warren commanded, and was killed at the battle of Bunker Hill. His biography has been so often written that his name and deeds are well known to all the readers of American history. President of the Provincial Congress of Massachusetts and Chairman of the Committee of Safety, he rendered services in the cause of American liberty which fully justifies Dr. Toner in saying that "no name, except that of Washington, is more cherished or will be longer retained in the hearts of the American people than that of Dr. Warren." We will only add that he was as eminent in the profession of medicine as he was afterwards distinguished as a military and civil leader in defending the rights of the colonies.

Let these examples be taken as a sample of many others recorded with faithful accuracy and graphic power by our author. He records the names and gives short biographical sketches of as many as twenty-three (23) physicians who were members of the Provincial Congress of Massachusetts in 1774-5, and thinks it probable that there are others whose names deserve a place in the list. He also gives the names of thirty-six (36) physicians who held military commands of various grades, with the remark that "a careful study would, no doubt, extend the list." This list includes the names of the two eminent physicians of Virginia, namely, Col. Theodore Bland and General Hugh Mercer, of both of whom most honorable mention is made. The former was also a member of the first congress of Philadelphia, and of the old congress from 1780 to 1783. General Mercer who had a great admiration for General Washington, had commanded a company in the Braddock expedition to Pittsburg where he was wounded. He then entered upon the practice of medicine at Fredericksburg until the breaking out of the war of Independence, when he raised three regiments for the Continental army. "He was a man of extensive acquirements, whose intellectual power and culture made him equal to any position, either in the councils of the state or a command on the field of battle." In leading the attack on the British at the battle of Princeton, he was mortally wounded January 3, 1777. His death was deeply deplored by his personal friend, General Washington."

The names of a number of other medical men of Virginia who rendered distinguished service in the civil councils of the allied colonies are given, including that of Dr. James McClurg, of Richmond.

Each of the several States is duly accredited with the services of its medical men. We have only room to allude to a few. New Hampshire had two physicians in congress who signed the Declaration of Independence. Dr. Oliver Wolcott, of Connecticut, was also a signer of the Declaration. So was the great Dr. Rush, of Philadelphia, whose reputation as a patriot is a common heritage of the nation, and of whose career as a physician after the close of the war it has been said (by Zimmerman), "His conduct has merited a monument, not only by the city of Philadelphia, but humanity at large."

North Carolina had among its honored representatives, Dr. Nathaniel Alexander, an ardent patriot during the revolution who served as a surgeon during part of the time, and subsequently as Governor of the State; and Dr. Ephraim Brevard, like Dr. Alexander, a graduate of Princeton, and to whom belongs the high distinction of having embodied, in a series of resolutions in

May, 1775, at a public meeting, held in Mecklenburg, the same principles which were enunciated in the Declaration of Independence a year later.

We are sorry, however, to see that Dr. Toner accepts as genuine the draft of the resolution said to have been passed at a meeting held on the 20th May, 1775, which draft was first published in the *Raleigh Register* of April 30th, 1819, signed by Abraham Alexander, chairman, and John McNitt Alexander, secretary. A copy was found among the papers of J. McNitt Alexander; but as Randall in his life of Jefferson has shown, Mr. Alexander set forth no claim that the copy preserved by him was the original record or a copy made from such original. His manuscript concluded thus: "It may be worthy of notice here to observe that the foregoing statement, though fundamentally correct, *yet may not literally correspond with the original record of the transactions of said delegation and court of inquiry, as all those records and papers were burnt with the house on April 6, 1800.*"

Now, on the other hand, Dr. Joseph Johnson, of South Carolina, discovered in the Charleston library, a copy of the *South Carolina Gazette and Country Journal* dated "Tuesday, June 13th, 1775," containing the long lost resolutions. Mr. Bancroft, then American Minister to London, found about the same time a copy of the same newspaper containing the Mecklenburg resolutions, which had been forwarded to Lord Dartmouth by Sir James Wright, then Governor of Georgia. Col. Force subsequently found copies of them in the *New York Journal* of June 29th, 1775, and in the *Massachusetts Spy* of July 12th, 1775. According to these well authenticated contemporaneous newspaper reports, the resolutions were passed at a meeting held, not on the 20th, but on the 31st May, 1775, and they are *signed by Dr. Brevard* as clerk of the committee. They differ materially in substance and wholly in style from those alleged to have been adopted on the preceding 20th May. Their style is incomparably superior to that of the latter which are only or chiefly remarkable for containing several parallel passages to those of Mr. Jefferson's draft of the Declaration of Independence by the United Colonies, adopted in July, 1776. These passages are marked by the same peculiar expression which, in Mr. Jefferson's papers, strike the popular mind and find an easy and permanent lodgment in the memory. When Mr. J. McNitt Alexander came, after an interval of fifteen or twenty years, to reproduce from memory the Mecklenburg resolutions, it need not excite surprise that he should have confounded some of the phrases of the two distinct declarations and have unconsciously

borrowed some of the popular expressions of Mr. Jefferson's paper, not one of which is contained in the contemporaneous publications which have been recently discovered. The correspondence in respect of these expressions has been made the ground of a preposterous charge of plagiarism against Mr. Jefferson, as if such a plagiarism would not have been more easily detected at the time than at the late date at which the charge was made. But enough of this point, which has been so thoroughly cleared up by Mr. Grigsby in his Discourse on the Virginia Convention of 1776, and by Mr. Randall in his Life of Jefferson, as to leave absolutely no room for a shadow of doubt. Let us, however, cite Mr. Grigsby's eloquent tribute to the author of the genuine resolutions of May 31st: "I cannot," he says, "express myself too warmly in favor of the superior skill with which these resolves are drawn. They deserve to rank among the first compositions of the great era in which they appeared, and which they adorn. The beauty of their diction, their elegant precision, the wide scope of statesmanship which they exhibit, prove incontestably that the men who put them forth were worthy of their high trust at that difficult crisis. * * * * And let me say they are from the pen of (Dr.) Ephraim Brevard, an exalted patriot, who, not content with the use of words, however gracefully in his country's cause, embarked at once in the military service, and in his capacity as surgeon, was taken prisoner at Charleston, and was at last dismissed on parole, but not until he had contracted a disease, of which he died after his return home. If North Carolina, like our own Virginia, were not too backward in testifying by overt acts her regard for her departed patriots, one of the first questions an American would ask on entering her beautiful metropolis would be, Where is the monument to Brevard? Well, sir, this paper, drawn with such consummate skill, speaks for itself and will speak forever."

When a second edition of Dr. Toner's address is called for, we trust that he will insert this paper of unquestioned genuineness in lieu of, or else in addition to the apocryphal Declaration of Independence, which in great part seems to be the work, not of Dr. Brevard, but of Mr. Alexander's confused memory.

In South Carolina, Dr. David Ramsay used, with effect, his pen in the interest of the colony, anterior to the revolutionary war, and was, throughout the struggle that ensued, a consistent and uncompromising friend of American liberty. While serving as surgeon he was captured by the British in 1780. On his exchange he was sent to congress in 1782, where he served with distinguished ability until 1786.

Georgia sent three eminent physicians to the Continental

Congress, namely, Dr. Lyman Hall, Dr. Noble Wimberly Jones and Dr. Nathaniel Brownson, the first named being one of the signers of the Declaration of Independence. It thus appears that the "broad and varied abilities and high culture of the medical men of America, were early recognized and appreciated as soon as they were brought into relation with leading and dominating minds of that period."

But after all, the chief interest of the address for medical men lies in the record of the efforts made by the medical officers of the army to render effective service under the disadvantages of want of proper organization and almost absolute destitution of commissary, quartermaster and medical supplies. Dr. Thacker's military journal is frequently quoted, and from the extracts given it appears to be a work of great interest. For details on this subject we refer our readers to the address itself, and especially to the numerous and valuable notes which have been added to it in its printed form.

We conclude this notice with an extract of especial significance and interest in the contrast which it exhibits between the conduct of General Washington and that of the Federal authorities at Washington during the late civil war.

"That General Washington entertained a high regard for medical men, and felt bound to secure them full justice in the army, is evidenced by his letter to General Smallwood, relative to the British brig Symetry, which had been captured by General Smallwood's forces in the Delaware near Wilmington. The prize contained many articles much needed by the officers and soldiers in camp; hence the feverish anxiety of all as to the regulations and principles which should govern the distribution of the cargo. The letter, so far as I know, has never been published. It is still in a good state of preservation, and is now the property of Dr. J. C. Hall, of Washington."

In this letter General Washington says: "As the common guardian of the rights of every man in this army, I am constrained to interfere in this matter, and to say that by these regulations a manifest injury is intended, not only to the gentlemen in the medical line, but to the whole staff," &c. &c.

Growing out of the capture referred to in this letter, General Washington made the following request of General Smallwood, which furnishes additional proof of his consideration for medical men and the medical profession: "A few days ago," he says, "I received a very polite letter from Dr. Boyes, surgeon of the 15th regiment, British, requesting me to return him some valuable medical manuscripts, taken in the brig Symetry. If they can be found, I beg that they may be sent up to me, that

I may return them to the Doctor. I have no other view in doing this, than that of *showing our enemies that we do not war against the sciences.*"

We trust that this address, with the valuable historical notes, will be read by every member of the profession in the United States.

J. L. C.

- (1.) *An Elementary Treatise on Diseases of the Skin.* By HENRY G. PIFFARD, A. M., M. D., Professor of Dermatology of New York; Surgeon to New York Dispensary for Diseases of the Skin, etc. With Illustrations. London and New York: Macmillan & Co., 1876. Pp. 375. (For sale by Randolph & English, Richmond.)
- (2.) *A Practical Treatise on Diseases of the Skin.* By LOUIS A. DUHRING, M. D., Professor of Diseases of the Skin in the Hospital of the University of Pennsylvania; Physician to the Dispensary for Skin Diseases, Philadelphia; Author of "Atlas of Skin Diseases," etc. Philadelphia: J. B. Lippincott & Co., 1877. Pp. 618. (For sale by West, Johnston & Co., Richmond.)

There is no class of diseases at all understood about which the general practitioner manifests so much of ignorance as cutaneous affections; hence a prevailing tendency to purely empirical practice when called to treat them—just as in former days, many physicians seemed content with the diagnosis of "heart disease" and the reckless prescription of digitalis—without regard to the character or site of the valvular lesion—so are there practitioners even at this day who seem satisfied with the diagnosis of "skin diseases," and the off-hand administration of arsenic, or the applications of tar, etc.

It is a thing of daily observation (to which Dr. Duhring alludes in the preface to his work), that skin diseases in many instances "differ in type as they are seen on the two continents—Europe and America." We are, however, informed by the same authority "that the diseases met with here resemble more closely those of Great Britain than those of either France or Germany." The practical lesson to be learned from such experience is that American practitioners, at least, should adopt American dermatological works as their text books. The works above named are especially to be commended to the practitioners of this country. Along with these should be mentioned the several valuable monographs of Dr. L. D. Bulkley, of New York, Editor *Archives of Dermatology*, whose special studies

and monographs have given him special prominence as an authority.

Dr. Piffard's book "is intended to serve as an introduction to the more elaborate works upon Dermatology." The style of composition is clear; the descriptions of disease are excellent; the illustrations (photo-micrographs and wood-cuts) are exact; the print is large and the appearance of the volume is attractive.

In the chapter on the pathology of the skin, we find a striking wood-cut, representing the principal lesions of the skin in profile. A glance at such an illustration gives the beginner a better idea of the appearance of macules, papules, tubercles, vesicles, etc., than pages of written description.

After a review of other classifications, Dr. Piffard chooses one based upon etiology, and adopts five groups of diseases, viz: Diathetic, General Non-diathetic, Reflex, and Local Affections and affections of an uncertain nature. We must confess a preference for the classification adopted by Dr. Duhring—a modification of Hebra's. This, it will be recollected, is based upon the character of the pathological process which characterizes the lesion.

The chapter in Dr. Duhring's work on Symptomatology is an excellent one. But for practical purposes—in this day when so comparatively few profess to know much about skin diseases—it seems to us that an improvement would consist in naming the diseases in which the various lesions occur as a part of their history. Dr. Piffard's work undertakes to do this, but he does not carry the specifications far enough.

Dr. Duhring's work is a larger volume; the print also is smaller, and the table of contents is much fuller. While "making no pretensions to being exhaustive," it is an admirable book for the practitioner. We are decidedly utilitarian in our views, and as a consequence, have a higher respect for that which is practical than for the theoretical. Hence we especially appreciate the sections on treatment, which, while mentioning "all those methods favorably regarded by dermatologists at large," yet especially "bring forward those remedies and modes of treatment which have proved of greatest benefit" in the experience of the author.

Our pages do not allow a fuller notice. Indeed the remarks we had written on psoriasis—especially its diagnosis from what is usually known as syphilitic psoriasis and its treatment—eczema, elephantiasis arabum, molluscum fibrosum, have to be omitted.

To sum up briefly our estimate of the two works: That by Dr. Piffard is the best for college students and those who are

beginning the study of dermatology. Dr. Duhring's work is the most serviceable to the practitioner of medicine chiefly because it is more comprehensive—has a much larger table of contents, etc.

The two works go together admirably, and whoever can, should have them.

Proceedings of the New York Pathological Society. Vol. I. JOHN C. PETERS, M. D., Editor. New York: Wm. Wood & Co., 1876. Pp. 272. (From the Editor.)

It is impossible, within a few lines, to notice this work properly. The plan of arrangement adopted by the London and Philadelphia Pathological Societies has been adopted in this Vol. I, which is based on the proceedings for the year 1875, and largely supplemented from the records of the Society from its foundation in 1844. The value of such records as this book contains cannot be over-estimated by the true student of medicine.

The work is prefaced by a very interesting History of the Origin and Rise of the Society. The Society was fortunate in securing the services of an editor so able and energetic.

Fourth Annual Report of the State Board of Health of Michigan. (Year ending September 30, 1876.) Secretary, DR. HENRY B. BAKER, of Lansing.

Besides the lengthly report by the excellent Secretary, giving a synopsis of the work of the Board, this volume contains the address of Dr. H. O. Hitchcock, President of the Board, on Achievements of Hygienic Science and Art; their Economic Relations to the State; Means for their further Promotion; a paper by Dr. R. C. Kedzie, on Means of Escaping from Public Buildings in Case of Fire; one by Dr. Arthur Hazlewood on Vaccination; Some Facts and Figures Concerning its Advisability, with Statements of Dangers to be Avoided; Report on an Epidemic of Scarlet Fever at North Lansing, 1875-6, by Dr. O. Marshall; Report on Criminal Abortion, by Dr. H. O. Hitchcock; Report on Sanitary Improvement in Schools, by Dr. H. B. Baker; Water and Water Supply in Michigan, by Dr. Arthur Hazlewood; Water Supply of Localities in Michigan—being replies to Circular No. 7; Water Supply of Michigan, by Dr. R. C. Kedzie; Methods of Collecting Vital Statistics, by Dr. H. B. Baker; Ventilation of Railroad Cars, by Dr. R. C. Kedzie; Diseases in Michigan during 1875, Statistics arranged by Secretary.

Explorations of the Aboriginal Remains of Tennessee. By JOSEPH JONES, M. D. Published by the Smithsonian Institution, Washington, 1876.

The field of Dr. Jones' investigations is fruitful. If the indefatigable author does not definitely establish the period when the mounds and earthworks of Tennessee were erected, nor name the nation formerly occupying the country, he yet gives accurate descriptions of the aboriginal remains of Tennessee, and satisfactorily locates their origin at a time prior to the discoveries of Columbus.

In ancient times the Mississippi Valley was undoubtedly inhabited by a comparatively dense population, which subsisted as well by products of husbandry as by the sports of the chase. These nations left no literature behind them; no inscriptions upon their monuments; a few rude paintings, generally with *red ochre*, upon high walls of rocks. Yet the close observations of Dr. Jones discover relics in sufficient quantities, and of sufficient importance upon which he can safely establish conclusions. The organic and monumental remains and works of art that came under Dr. Jones' inspection, establish the fact that they were not the relics of nomadic tribes, but of a people closely allied to the civilized nations of Mexico and Central America. The excessive mortality from epidemics may have been sufficient cause to destroy the nation. They left their stone sepulchres and bones, their idols, their implements of war and peace.

Dr. Jones discovered indubitable marks of syphilis in the bones of many skeletons enclosed in the stone graves. This would seem to establish the theory, which many have maintained, that this disease was of American origin.

We cannot, in a few paragraphs, more than indicate the scope of this valuable contribution. The way for further investigations has now been opened. Who will be so thorough and conscientious in his labors as Dr. Jones?

The Electric Bath: Its Medical Uses, Effects and Appliance.

By GEORGE M. SCHWEIG, M. D., one of the Physicians to the New York Lying-in Asylum, etc. New York: G. P. Putnam's Sons, 1877. 12 mo.—Pp. 134. (From Publishers.)

This handbook is both instructive and entertaining. It contains a description of the necessary apparatus; the mode of administration of the Bath; the Physiological and General Therapeutic Effects and Uses; and a chapter on Special Therapeutics and Clinical Record.

The great trouble about the use of electricity is that the ne-

cessary apparatus is too costly, the administration takes up too much of the time of a busy practitioner; and the principles which should govern its prescription are not sufficiently well understood. In every community of sufficient population to sustain him, there should be one or more properly equipped specialists for the administration of electricity. To such an one, this book would be especially serviceable.

Chemical and Microscopical Analysis of the Urine in Health and Disease. By GEO. B. FOWLER, M. D., Examiner in Physiology, College of Physicians and Surgeons, New York. New York: G. P. Putnam's Son's, 1876. 12 mo.—Pp. 96. (From Publishers.)

This is the second, revised and enlarged, edition of a work with eighteen illustrations, that we had occasion to commend nearly two years ago. It is intended simply as a "guide" for the practitioner. The revision is thorough, and the book is now a really valuable one.

Transactions of the American Medical Association, 1876. Vol. 27. Pp. 719. DR. WM. B. ATKINSON, Philadelphia, Secretary.

This volume is just received. The full report we gave of the proceedings of this session in our July number, 1876, renders a further notice unnecessary—especially as we have no room to spare just now.

Miscellaneous.

Licensed Practitioners and the Quacks in California.—The *San Francisco News Letter and California Advertiser*, Feb. 3d, 1877, says: "The longer we keep our columns open to the discussion of medical affairs, the more startling the evidence becomes that it is a most dangerous thing to send for a doctor in San Francisco unless you know who you are sending for." For the public good, the *News Letter* publishes a list of nearly 200 quacks in that city who could not stand the examination before the California Board, and who, as a consequence, have to discontinue their practices, or seek homes in other States where no protection is offered the people. The *News Letter* also gives a carefully prepared alphabetical list of those who passed the Board and are allowed to practice in San Francisco—about 300 regulars; about 80 homœopaths; and about 115 eclectics. Even in this list, those who have obtained their diplomas from colleges of doubtful repute are marked by a star.

The American Medical Bi-Weekly is the successor of the *Medical Weekly*, edited by Dr. E. S. Gaillard, Louisville, Ky. Each number contains about 26 large, double-column pages, on rose-tinted paper; price, \$3.10 a year. The *Bi-Weekly* starts off well. Indeed, the rapid development of the *Weekly*, and the deserved success attained by the *Richmond & Louisville Medical Journal*, also conducted by this veteran editor, will serve as a guarantee that the *Bi-Weekly* will be no less popular and useful to the profession. The three numbers received of this new [?] journal are excellent.

The Toledo (Ohio) Medical and Surgical Journal, Jonathan Priest, M. D., Editor, 32 pages monthly, \$1.50 annual subscription price, is another new journal, begun January, 1877, asking professional support. An examination of the first number leaves a favorable impression; it deserves support.

The Use of Chloroform as an Anæsthetic has been interdicted in Bellevue Hospital, New York. It is remarkable that here at the South those in general surgical practice have not yet met with those accidents in the use of chloroform so common in the North, and which prohibit its anæsthetic use there. The experience of Southern surgeons, as a rule, leads them to *prefer* chloroform.

To Destroy Warts, **The Canada Medical Record**, January, 1877, knows of nothing better than the leaves of the common bean. Crush the leaves between the fingers and squeeze out the juice upon the warts two or three times daily until they dry up and disappear. The cure will generally be complete in less than a week.

The same journal quotes from an exchange that a drachm of nitrate of silver, dissolved in an ounce of nitro-muriatic acid, makes a solution which, applied to warts with a fine brush, will permanently cure them in four days.

The Medical Brief quotes *L'Union Medicale* as saying that three or four applications of chromic acid will cause the disappearance of warts, however large, hard or dense they may be. The application gives rise to neither pain, suppuration, nor cicatrices; the sole inconvenience being the production of a dark-brown color.

Dr. F. A. Emmons' Medical Directory of Illinois, for 1876, is received, and serves a valuable purpose. For further information, address Dr. Emmons, 978, Wabash Ave., Chicago, Ill.

The Penalties of Dueling in New England.—The *Boston Medical and Surgical Journal* says: "The action of the grand jury in the case of Dr. Phelps, of New York, who attended the recent duel as the surgeon of Mr. Bennett, may suggest to many of our readers the propriety of consulting the laws of their respective States in this matter. In Maine the presence of a person at a duel as a surgeon, though no homicide ensues, is punishable by imprisonment for not more than twenty years, or by fine not exceeding one thousand dollars, and by ineligibility for any place of honor, profit or trust for twenty years after conviction. The engagement to act as a surgeon at a duel renders the person liable to imprisonment for not less than one year, and to be incapable, as in the preceding section, for five years. In Vermont the presence of any person by previous engagement or appointment as a surgeon on the occurrence of a duel, the result of which is fatal to either party, renders him liable to imprisonment for not less than five years, or to a fine not exceeding one thousand dollars, and to be forever incapable of holding any place of honor, profit, or trust under the Constitution and laws of the State. In Massachusetts the surgeon is liable to imprisonment in the State Prison for a term not exceeding five years, or in jail not exceeding three years, and to a fine not exceeding one thousand dollars. The penalty in Rhode Island is also a heavy one."

The Atlantic Monthly.—The January and February numbers (1877) of this most valuable Journal, are received. Their contents are of unusual interest. The publishers, Messrs: H. O. Houghton & Co., Boston, are sparing no cost to keep the Journal up to the highest standard.

Vital Statistics of Selma, Ala.—The Annual Report for 1876, by Dr. W. P. Reese, Health Officer, &c., states the white population to be 3,500; colored, 4,500. There were sixty-two deaths among the whites, and 105 among the blacks. Ratio of deaths per 1,000, deducting still-births, 16.87; including still-births, 20.85. Total births, 95 whites; 143 blacks.

Obituary Record.

Dr. Samuel Watkins Vaughan died of heart disease at his home in Selma, Ala., aged 76 years. He was born in Mecklenburg county, Va., graduated in Philadelphia, and afterwards served in the hospitals of that city and of New York. He began practice in Middle Tennessee, but afterwards removed to Ala-

bama. "His acknowledged skill, and the extent of his scientific knowledge and great experience, drew to him the confidence of his professional brethren, who freely consulted him up to the time of his death." A well-deserved tribute is paid to the memory of Dr. Vaughan by Senator-elect, General John T. Morgan (in the *Southern Argus*, Feb. 2d). The writer also indulges in a handsome eulogium of the medical profession—the more appreciated in that it comes from a representative member of another profession—the legal.

Tribute of Respect to the Memory of Dr. Jacob Haller.—

At a meeting of the Wythe County Medical Association, Wednesday, January 30th, Dr. S. R. Sayers, President, occupied the chair, and Dr. V. C. Huff acted secretary.

Drs. S. C. Gleaves, Wm. Farmer and R. E. Moore were appointed a committee to draft suitable resolutions in regard to the death of Dr. JACOB HALLER, who was a member of the Association. The President was added to the committee.

The following preamble and resolutions were unanimously adopted:

We, the members of the Wythe County Medical Society, remembering with pride and personal regard the high professional attainments and the amiable, social qualities of our deceased friend and brother, Dr. JACOB HALLER, who fell asleep on the morning of January 28th, 1877, would, in the following resolutions, give permanence to the expression of our esteem of the deceased:

Resolved, That in the death of Dr. Haller our profession has sustained the loss of one of its most distinguished members—the career of one being terminated who had been *arduously* and inseparably connected with our profession for sixty years, and who, till his lamp of life was extinguished by the night of death, gave himself with ardor and self-sacrificing devotion to the practice of his profession.

Resolved, That the members of this Society, as a token of respect for our deceased member and brother, will wear the usual badge of mourning for thirty days.

Resolved, That a copy of these resolutions be furnished to the family of the deceased as the last mark of respect that earth can tender to the dead.

Resolved, That the proceedings of this meeting, together with the resolutions, be published in the *Virginia Medical Monthly*, Richmond, and in the *Enterprise* and *Dispatch*, of this place, and spread upon the minutes of our Society.

Died, January 9th, 1877, Dr. JOHN MARX, one of the oldest practitioners of Richmond.

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RICHMOND, MARCH, 1877.

Original Communications.

ART. I.—*Clinical Observations on Inflammation of the Mastoid Cells.* By EDWARD C. HARWOOD, M. D., Member New York County Medical Society; of New York Neurological Society; of American Medical Association; Late Delegate to, and Honorary President of the International Medical Congress at Brussels, 1875. (A Paper read before the North-Western Medical and Surgical Society of New York, EDMUND FOWLER, M.D., President, November 15, 1876, with a Report of the Discussion by Members of the Society).

Mr. President and Gentlemen,—The paper as announced for this evening is founded upon one case, selected from several which have come under my observation.

It is not my purpose to enter into an elaborate and extended dissertation as to the nature and causation of the affection under consideration. Suffice it to say that the disease, in my experience, is more frequently the result of a strumous diathesis, cold, neglected otorrhœa following scarlatina and measles, etc. It is oftener observed in children than in adults; in the latter, it frequently results from traumatic causes and syphilis.

CASE.—Julia Higgins, now before you, aged 10 years, residing in this city, had, as I was informed, always up to this time (April, 1874,) been a healthy and active child, with the exception that at the age of six she suffered considerably from whooping cough and scarlet fever, which were both severe. During the paroxysm of coughing, the cerebral congestion was of a remarkable character. She often had bleeding from the nose and ears, accompanied by vomiting. On recovering from her attack

of scarlet fever, there remained a discharge from the left ear, which continued until about the middle of September last without interfering with her general good health. A few days before I saw her, while at school, she was attacked with ear and toothache, in consequence of which she was obliged to go home and remain there. So great was her suffering, that on the morning of April 18th, 1874, at 2 o'clock, her parents were obliged to seek the advice of a physician.

When I arrived at her bedside, I found her in convulsions. A hot water and mustard pediluvium was ordered, and dry cups were applied to the nape of the neck, but without the desired effect. I then administered chloroform by inhalation, which promptly arrested the convulsions.

I now discovered that her pupils were widely dilated, giving no response to light, and that there was complete paralysis of the right side—the latter condition being first made manifest by the fact that when the bed covering was turned down from the chest, she would immediately pull it up again with her left hand. The left side immediately responded to irritation; but over the entire right side there was no sensation. I therefore diagnosed compression of the brain, from an unknown cause, and regarded the case as a desperate one. The pulse at the time (3 o'clock A. M.) was 160 per minute; temperature, 105°F. I administered* *ol. tigli*, gtt. ij, placing it well back upon the tongue, together with an enema,† composed of *ol. ricini*, ʒss; *ol. terebinth.*, ʒss; *aq. bul.*, ʒiv. In twenty minutes the patient arose from her bed, and walked in a delirious manner about her room, moaning the while; then she evacuated freely both the rectum and bladder; after which she voluntarily assumed the recumbent position—still, however, manifesting traces of delirium. The pupils now appeared natural, and readily responded to a strong light. At 5 o'clock A. M., the pulse was down to 120; temperature, 102°. I then ordered:

‡R. Potassii iodidi. ʒj
 Potassii bromid..... ʒss
 Aquæ puræ..... ʒiv'
 Syrup. glycyrrhizæ..... ʒj M.

Sig. A desertspspoonful every hour until my return, which was about 9.30 A. M.

On my return, I found her sufficiently conscious to recognize

Metrically rendered—

*R. <i>Ol. tigli</i> , gram.....	.65	
†R. <i>Ol. ricini</i>		
Tereb. aa gram.....	14.76	
Aq. bull.....	118.	M.
‡R. Pot. iod. gram.....	3.69	
Pot. brom.....	14.76	
Aq.....	118.	M.

her friends, but some of those whom she knew most intimately she could not call by name. The treatment was continued with slight variation, administering the bromide mixture at longer intervals until the 22d, during which time I had ascertained that the cerebral trouble and hemiplegia were the result of inflammation of the mastoid cells. I determined to operate, and with that view I had this instrument (Fig. 1), made by Darrow & Co., of this city.



Fig. 1.

On the morning of November 23d, 1874, assisted by my friend, Dr. Charles A. Leale, having anæsthetized the patient with sulphuric ether, I made a crucial incision over the mastoid process, about one-half an inch posterior to the ear, down to the bone, which was found to be roughened. About two ounces of pus immediately made its exit. Then with a small trephine ($\frac{7}{16}$ ths of an inch, Fig. 1), I cut through the table of the bone, and the removal of a corresponding-sized button was followed by a small amount of pus. The wound was then closed by two sutures, with the exception of the lower portion, which was left open for the exit of pus, and dressed with cold water.

1 o'clock P. M. Patient comfortable, with the exception of slight pain in the region of the wound. Pulse, 106; temperature, 99.8°. Ordered tinct. opii, if necessary to procure rest.

5 P. M. Temperature, 104°; pulse, 106; tinct. opii given.

Nov. 24, 10 A. M. Patient had a good night's rest—sleeping until 8 A. M., when bromide mixture was given, together with generous diet. Pulse, 100; temperature, 98.5°.

3 o'clock P. M. Pulse, 100; temperature, 99.5°. Sprayed the wound with carbolized soap and water, and dressed the same with carbolized tow moistened with warm water.

I shall not attempt to give a detailed statement of the symptoms and treatment; suffice it to say that the case was closely watched, all symptoms noted, and indications promptly fulfilled. She was ordered a generous diet, with as much fresh air as she could avail herself of; and no unfavorable accident supervened to prevent her rapid progress toward health, and I discontinued my daily visits on the 12th of the following month:

I again quote from my notes:

Dec. 21. The family have been attending to the dressing since my last visit. Some discharge continues from the external ear, as well as from the upper and lower sinuses of the wound. I

left the case, with instructions to call at my office if anything appeared to be wrong.

In five days, my patient called and was entirely well, with the exception of deafness in the left ear, and continued so until about two weeks since. Complaining of pain in the ear and tenderness over the track of the old cicatrix; syringing with warm water relieved her.

I recently mentioned the particulars of the case to my friend, Dr. D. Webster, who kindly requested me to send the patient to his office for examination. She accordingly went, and returned with the following note:

"No. 19 EAST 39TH STREET, }
"NEW YORK, November 11th, 1876. }

"*My Dear Doctor*,—Julia Higgins is, so far as I am able to judge, entirely deaf in her left ear. She does not even hear the tuning fork with it when placed against the forehead. She has a large perforation of the membrana tympani, leaving only a rim on all sides, except the lower portion, where not a vestige is left. The auditory canal is normal, except that it is somewhat excoriated from being constantly bathed with offensive pus from the middle ear. That there has been loss of substance of this mastoid is evident enough.

"Hoping to meet you Wednesday night, I remain

"Yours sincerely, D. WEBSTER.

"P. S.—Cleansing and astringents are indicated. D. W."

This, Mr. President, completes what I have to say at present on the subject; and as it is the custom of the Society to allow its members to express their views on all subjects brought before it, I hope to be followed by remarks or the narration of cases by others, which will no doubt add material interest to this meeting.

Prof. J. L. Little, M. D., said: I have listened with a great deal of pleasure to Dr. Harwood's interesting paper on mastoid disease. The operation of trephining or opening the mastoid process, in cases of suppuration or caries of the mastoid cells, has become of late years a recognized procedure. In two cases which have occurred in my practice, after an incision was made through the soft parts and the bone exposed, a fistulous opening was found, leading into the mastoid cells. In a large proportion of cases, this condition will be found when the external incision is made, and all that is necessary for the surgeon to do is to enlarge this opening so as to permit a free escape of the pus. This

can be very easily done, I think, by an instrument used by dentists called the "burr drill." These drills can be obtained of different sizes, so that the opening may be enlarged to any extent. (The doctor exhibited these drills to the Society, Fig. 2.)

Mastoid disease is rarely, if ever, a primary affection. In all the cases which have come under my notice, a discharge from the ear had existed for some time previous. Inflammation of the middle ear, with perforation of the membrana tympani, is the primary difficulty. Patients with so-called "otorrhœa," or, more properly speaking, suppuration of the middle ear, are always exposed to two formidable complications: *First*, Mastoid disease, and *second*, cerebral abscess by the extension of the inflammation through the roof of the tympanum. This last condition occurs more frequently than the first, and is always fatal.

In all cases where complaint is made of severe pain in the head, accompanying a discharge from the ear, a careful examination of the mastoid process should be made, and if tenderness exists, or if the scalp is swollen and œdematous, at this point a free incision down to the bone should be made at once. In some cases, simple periostitis exists, and the incision gives immediate relief. If relief is not afforded, perforation or trephining of the mastoid should be resorted to.

A case of this disease came under my observation while lecturing at Burlington, Vt., last June. I was called in consultation with Dr. A. P. Grinnell to see an old lady about 65 years of age, who had suffered from a discharge of pus from the right ear for some months. About two weeks before I saw her, she had severe pain in the right side of the head, and especially in the vicinity of the mastoid. Swelling over the mastoid took place, and Dr. Grinnell very properly made an incision, and a quantity of pus made its escape. On examination, I found the external meatus filled with pus, and so swollen that a speculum examination could not be made. The incision over the mastoid was enlarged, and a probe could be



Fig. 2.

passed through the bone into the mastoid cells, and as the pus seemed to have a free outlet, nothing more was advised to be done. Prof. D. B. St. John Roosa, M.D., of this city, was present, and concurred in the advice. In a few days after, however, brain symptoms manifested themselves, and the patient sank into a comatose condition and died.

In conclusion, Mr. President, I would call the attention of the members of the Society to the importance of a careful examination and the early treatment of all cases of aural disease accompanied by a discharge of pus from the ear.

* Dr. C. S. Wood said: I have, during a period of twenty-five years, been so fortunate or unfortunate, as to have seen quite a number of cases of mastoid disease; some of them terminated fatally, while others have recovered by the supervention of suppuration from the ear. We all are well aware that the cause of the disease is suppurative otitis and is usually the result of scarlet fever. As a rule suppuration has existed, for a considerable period of time, the child enjoying good health in the meantime, when, from exposure to cold, the discharge suddenly ceases, or nearly so, at which time cerebral symptoms at once become manifest. There is fever, anorexia, vomiting and restlessness, often preceded by convulsions, soon followed by coma and local or general paralysis. On examination of the postauricular region, usually, there is found, more or less redness, and tumefaction, pressure upon which causes the patient to cry with pain. In such cases there are no question about the propriety of making a free incision down to the bone, which, with the application of warmth and moisture over the ear, will, by the re-establishment of the discharge relieve all the threatening symptoms. In the majority of the cases, such will be the result, but, if the suppuration is not reproduced, the severe symptoms will not yield, when it may become necessary to make an opening through the outer table of the skull. Even after this operation many, perhaps, according to my experience, most of them die, as we do not always get pus as expected, it having formed, by a sort of metastasis, in some other portions of the brain.

I have recently lost a case, a girl aged six years, where the suppuration had existed for more than two years, caused by

scarlet fever, which ceased suddenly after exposure, when cerebral symptoms immediately supervened, without any special evidence of mastoid disease, sufficient to justify an operation. Still she had strabismus, vomiting, coma, &c., and died within a week from the time of attack as I predicted she would unless the discharge from the ear could be re-established, which, unfortunately, was not the case.

I have lost several patients under similar conditions, and some of them after operating and expecting to find pus enclosed in the mastoid cells, and am of the opinion, that where we can re-establish the original discharge (which in the majority of cases we can do) they will recover; but if not, whether with or without an operation the prognosis is very grave.

Dr. A. R. Robinson said: Inflammation of the mastoid cells can follow either an otitis interna, or a periostitis partis mastoideæ ossis temporis. This latter inflammation can be either primary *i. e.* arise independently from mechanical injuries or chemical irritants to the part; or, as is generally the case, it is secondary to some inflammation in the neighborhood. The most frequent cause, however, of an inflammation of those cells is an otitis interna purulenta. This form of inflammation can arise *ex contiguo* from inflammation in cavo pharyngo-nasali, and is a frequent sequence of scarlatina and variola, especially in scrofulous children. Inflammation of the mastoid cells appears to be a common accompaniment of a purulent inflammation of the middle ear; but it is rare for the inflammation to pass further inwards. When this latter occurs it does so by passing along the vessels and connective tissue bundles in the sinus sigmoideus producing a phlebitis in the sinus; or a thrombus is formed with or without a breaking down of the latter, and from here, the inflammation passes inward and produces a meningitis, or encephalitis or both. I can confirm Gubler in the statement that inflammation of the brain is not a frequent consequence of an otitis interna in young children, for though I have seen a great many cases of otitis interna purulenta in children—and consequently of inflammation of the mastoid cells, I have not yet seen a case in which the inflammation has passed to the brain or its membranes. When the inflammation is seriously threatening to extend inwards from the mastoid cells in

spite of the operation of myringotomie or spontaneous perforation of the tympanum by the pent-up pus, the operation of trephining down to the cells should, according to all authority, be performed without delay. These cases, when operated upon, however, are usually not so fortunate in their termination as was Dr. Harwood's. Therefore, on account of this very danger of the inflammation spreading from the mastoid cells inwards and proving fatal, I think cases of inflammation of the middle ear especially, should not be neglected in the manner they usually are, either because the patients are unaware of the possible ulterior result, or that the physician in charge is not competent to treat such cases and allows them to proceed unchecked. Such cases, I believe, should always be placed in competent hands, and I never fail to direct such patients where they will receive the proper treatment. But few medical men possess the requisite knowledge to treat those cases, and if the forms of ear diseases which sometimes lead to inflammation of the mastoid cells, and from them to the brain or its meninges were early and judiciously treated, there would be fewer fatal cases from implication of the brain, and the valuable sense of hearing would be oftener preserved than is the case at present.

Dr. J. A. Adrain, of Logansport, Ind., being present, was called upon for an expression of his experience and observation in the treatment of the case under consideration. He asked: When there has been for a long time considerable swelling or tumefaction, redness, tenderness and pain, in the mastoid region, with or without a discharge from the ear, is the surgeon justifiable in cutting down and making an opening into the mastoid cells?

Dr. Little answered in the affirmative.

Dr. Adrain said: In the course of a long experience, and somewhat extensive observation, I have been led, and especially of late years, to make a free opening. In the cases where there had been a discharge from the ear, it almost invariably ceased, after an opening into the mastoid cells; and in these cases where no discharge existed, there was no subsequent discharge. In these cases when a discharge has existed for a long time, the incision should be kept open for sometime; otherwise the dis-

charge will not be permanently controlled. I think the disease is most frequently associated with a strumous diathesis. When such is the case, tonics and mild alteratives, and in short, remedies which will elevate and sustain the vital forces will be of much service in accomplishing a permanent cure.

Dr. Harwood said: I have listened with much gratification to the remarks which have been made, and consider them of very much importance in connection with the subject as presented. Prof. Little's mode of operating differs considerably from my own. I see no reason, however, to take exceptions to it; but as a matter of fancy, I prefer to operate with the instrument I have devised, at the same time extending the privilege to others of selecting whatever mode of procedure or instrument that may be desirable. An ordinary carpenter's gimlet has been successfully used for this purpose. The important point to bear in mind is to operate early when necessary.

ART. II.—*Treatment of Pelvic Cellulitis by Muriated Tincture of Iron and Sulphate of Quinia.* By C. C. McDOWELL, M. D., Physician to Out-patients, University of Maryland, Baltimore, Md.

Owing to the confusion in the nomenclature of inflammations of the pelvic organs and tissues, due to the attempt to strictly localize each inflammatory disturbance, and to give it a name in accordance with its seat, thus dividing pelvic cellulitis into perimetritis, parametritis, inflammation of broad ligaments, etc., it is proper to state that these distinctions are not observed in the cases reported below. Pelvic cellulitis is here understood to embrace all those forms of inflammation occurring in the neighborhood of the uterus, in which the inflammation of the cellular tissue is the *prominent* lesion, and which, in its usual course, tends so markedly to suppuration. In not a single case that I have ever seen has there been absence of such complication as metritis, more or less peritonitis, etc.; nor do I believe that such freedom exists. In all cases, however, the *cellulitis* was that which was forced upon the attention, and which most earnestly demanded treatment.

Suppuration has been regarded as an almost necessary result of this disease—this being particularly true of cases occurring in debilitated or cachectic persons. Hence, we are disposed to await it as a necessary evil, or else to place our sole reliance for its prevention, and the induction of resolution, upon rest, poultices to the hypogastrium, and rubeficients. If we can, however, find a more direct means to promote resolution and lessen the liability to suppuration, with its attendant train of evils, the consequences of the disease will be much less grave, and our dread of it will be proportionately diminished. But, notwithstanding resolution, the uterus and its appendages may be left in a disabled condition, in consequence of peritoneal adhesions, metritis, salpingitis, etc. Yet, these results are not to be dreaded so much as when are added to them those consequent upon an unhappy point of discharge of the abscess, the cicatrization of large cavities, or their conversion into chronic abscesses, etc.

For the last year, in the hope of inducing resolution in these cases, I have been using free doses of tinctura ferri chloridi, with quinia sulphas. The iron was administered in quantities ranging from forty minims to one drachm, as the stomach would bear it, with from two to three grains of quinia every three hours, until evidences of absorption of the effused matter could be observed, when the intervals were lengthened and the quantity gradually reduced.

I subjoin reports of half a dozen consecutive cases so treated :

CASE I.—Miss D., aged 23, had been suffering with anteflexion of uterus, with chronic endometritis, for about six months. The flexion was corrected, applications of Churchill's tincture of iodine were made to the uterine canal, a pessary was introduced to prevent a recurrence of the flexion, and rest was enjoined. This injunction was, however, disregarded, and in consequence of over-exertion, she was seized, Oct. 2, 1875, with symptoms of pelvic cellulitis. The removal of the pessary was attended with a great deal of pain, particularly upon the left side. There was a marked tenderness upon pressure in the left hypogastrium. Fever was present. Movement upon the bed caused pain.

Oct. 3. The uterus was found firmly fixed by a large mass of effusion occupying the left side of the true pelvis, which was very sensitive to the touch. Pain and throbbing were complained of, with a sense of fulness and weight in the pelvis.

Morphia was used hypodermically, and hot cataplasms of digitalis leaves, frequently renewed, were ordered to be kept constantly over the seat of pain. Prescribed also iron and quinia, as above stated. Temperature during course of disease reached 104°F. , and the patient was, for a portion of the time, delirious.

Oct. 7. Effusion is lessening in quantity.

Oct. 10. Stopped iron mixture. Effusion has disappeared, with the exception of a nodule about the size of a marble. Ordered iodide of potassium in solution. Under this treatment, the effusion entirely disappeared; no fixation of uterus resulted, but endometritis was increased.

CASE II.—M. S., colored, aged 37, had had an attack of pelvic cellulitis some time before she came under notice, which had resulted in suppuration—the abscess discharging per vaginam. A pessary had been applied to relieve the mal-position of the uterus, occasioned by the inflammation. When I was called, *Feb. 11, 1876*, the pessary had occasioned, by its pressure upon the old inflammatory adhesions, a second attack of pelvic cellulitis, confined principally to the left side. The pessary was removed at once, and the patient ordered to remain perfectly quiet in bed. Poultices were ordered to the lower abdomen, and iron, with quinine, prescribed, as in the preceding case. In this case, the stomach of the patient was very irritable, and it was with difficulty that the drugs could be retained; but by use of antiemetics it tolerated sufficient to accomplish the result.

Feb. 18. The effusion is subsiding, although the uterus is still fixed, partly in consequence of old adhesions.

Feb. 20. Effusion still subsiding; no fluctuation discoverable.

Feb. 24. Effusion not recognizable, but number of adhesions increased and uterus fixed; no suppuration. This patient remained under observation some months longer, receiving treatment for tuberculosis, with which she had been struggling for a year, and during this time there was no discharge of pus, nor evidence of intra-pelvic suppuration.

CASE III.—Mrs. E. G., aged 33, applied for treatment *Feb. 20, 1876*, with symptoms indicative of uterine disease. On vaginal examination, I discovered retroflexion, with peritoneal adhesions strapping the uterus in its abnormal position. Had undergone the operation of splitting the cervix, for sterility, several years before, which had been followed by formation of pelvic abscess, which discharged per vaginam a large quantity of pus.

Feb 28. She took a long walk, moving rapidly, and was seized same night with rigors, succeeded by fever.

March 1. I found all indications of pelvic cellulitis present—effusion on left side, firmly fixing the uterus. Poultices of digi-

talis leaves were ordered, as in Case I, with absolute rest, and iron, with quinia, as before, and with same result—the effusion disappearing without suppuration by March 12.

CASE IV. Miss L., aged 50. Removed a mucous polypus from cervix uteri, and cauterized the surface from which it was torn with argenti nitras. This excited a cellulitis occurring on the right side. I was called to see the case *March 26*, at which time the disease was two days old. Pursued the same line of treatment.

April 7. Resolution had removed the effused matter, no suppuration occurring.

CASE V.—Mrs. C. G., aged 42, strumous cachexia. Called *July 16*; cellulitis occurring on left side as a result of improper application of Hodge's pessary, which had been introduced to overcome the results of a previous cellulitis. Same treatment as in previous cases ordered.

July 23. Symptoms of suppuration, viz.: general rigors, throbbing in the part affected, etc.

July 27. Abscess discharged, but quantity was quite small, although the effusion was moderately large. Although the resolution was not complete, still it removed the greater part of the effused matter.

CASE VI. L. B., colored, aged 26. *June 1*. Cellulitis left side. Same treatment ordered as in preceding cases. Result: Resolution; no suppuration. In this case, also, there existed old peritoneal adhesions, binding the uterus in the extreme of the second degree of prolapsus; *i. e.*, the cervix uteri was almost procident. This patient was also tuberculous.

Remarks.—It will be observed that in *only one* of the six cases did suppuration occur, and in that to a limited extent only—there having escaped, per vaginam, about half an ounce of pus; but, judging from the amount of exudation, two ounces would not have been excessive. That suppuration occurred at all may be in part explained (1) by the debilitated condition of the patient and her tuberculous cachexia; and (2) by the fact that the disease had existed two days before the patient was seen and the therapeutical agents exhibited. I do not, however, pretend that this method of treatment can be universally successful, or even universally applicable; but I do think that, when we consider the unfavorable circumstances under which, in some cases, it was used, and the success it met with (as in cases II, III, V and VI, where the tissues were weakened and in an abnor-

mal condition—the result of previous disease—and where tuberculosis or the tuberculous cachexia was present), we are justified in expecting better results from it than from the old routine treatment. There is no occasion to fear the doses named, nor even larger ones, if deemed requisite; nor should we fear their frequent repetition; for in cases of erysipelatous cellulitis—a somewhat analogous condition—*very* free doses of the same drugs are beneficial. An opportunity has not as yet presented itself for the exhibition of this treatment in certain analogous forms of pelvic abscess consecutive to parturition, but benefit might be reasonably expected.

This, and similar treatment, prescribed with the view of maintaining cell vitality until nature has had time to recover itself and commence its reparative work, is, I think, worthy of a much wider application than is now conceded to it by the profession.

290 Madison Avenue.

ART. III.—*Quinine as an Oxytomic*.* By C. E. RISTINE, M.D., Edgefield, Tenn. (Read before the Nashville Medical Society, November, 1876.)

All our knowledge of the value of medicines, their respective action upon the human system, and their antagonistic influence to disease, is based solely upon experimental truths. And the known therapeutic influence of certain medicines to produce certain results, are facts deduced from *rational empiricism*. “A practical notion, well established, possesses no less dignity than a scientific principle.” We find many physicians who ignore the truth when it comes in conflict with their pet theory. However, in my advocacy of quinine, its relative value, &c., as an oxytomic, experimental physiology and pathology will not suffer theoretically.

*This paper is of great practical interest, especially in connection with that of Dr E. T. Easley, of Little Rock, Arkansas, published in our July number, 1876. The literature on this subject is now sufficiently abundant to establish the claims here made for quinine as an accelerator of labor in cases of inertia, as a preventive, as it were, of post partum hæmorrhage, and as a remedial agent for this last mentioned condition. While we cannot, in the light of accumulated experience and observation, displace ergot from its high rank in the list of remedies for these conditions, we are yet compelled to advance the position of quinine to one of great usefulness—not second to that of ergot.—EDITOR.

I consider it, not an optionary disposition, but the bounden duty of every physician to accelerate, if possible, by any rational means, that painful period in woman's life known as labor. The proportion of cases, however, requiring the use of any means to accelerate parturition is relatively small; probably the largest proportion of cases requiring the use of uterine motor stimulants, are old primipara, where an atonic condition exists, indicated by deficient labor pains, prostration and nervous excitement; and in these cases a singular disposition often exists to post partum hæmorrhage and puerperal fever. This disposition to post partum hæmorrhage may be diagnosed* during the second stage of labor, and being diagnosed, may be prevented by timely interference. Dr. Ewing Whittle says that hæmorrhage may be expected when the pains during parturition are "strong and quick;" they do not gradually culminate into a strong pain and subside again, but they are sharp, quick, and cease almost suddenly, and the intervals between the pains are long in proportion to the length of the pains."

Now it is in these and all other cases where delay is caused by inertia, insufficient nerve energy and functional activity, that we as physicians are called upon to relieve the defective or even pathological action, and, by the use of the proper remedy, change it into a simple physiological process. This proper remedy, which experience has taught me to be the least objectionable, except in its administration, as a uterine motor stimulant is the sulphate of quinia. And I speak confidently of quinine as the means *par excellence* in all cases of inertia. Aside from its specific antiperiodic properties, it possesses a peculiar astringent and tonic influence upon nerve and muscular fibres, and hence in atonic conditions such as inertia it finds its most valued application.

What commends it to my *special* favor in preference to other articles used for this purpose, is its direct and certain beneficial effect—not to increase the force of the pains so much as the regulation of their intermittent character.

The conclusions I have drawn of the relative value of oxytocics of quinine and ergot may be tabulated as follows:

*As a further aid to diagnosis of disposition to hæmorrhage, we would call attention to the valuable paper in our August number, 1875, by Dr. Harvey Black, on the *Character of the Pulse Premonitory of Post Partum Hæmorrhage*.—EDITOR.

Quinine excites certain and regular uterine contractions.

Quinine exerts no direct or indirect appreciable influence over the mother or foetus in utero.

Quinine lessens the disposition to, or altogether precludes the probable approach of puerperal fever.

Ergot, uncertain in its action, and without any regulating influence when it excites uterine contractions.

Ergot is said to have a dangerous effect upon the child, and it is occasionally injurious to the mother,

Ergot has no antiseptic property as yet discovered.

We find the evidence of all unbiassed observers in England, Germany, France and other foreign countries, as well as in our own, to accord with the above statement; that when quinine is given at the onset of the process of labor, it increases the normal uterine contractions; at the same time they retain their intermittent character, as contrasted with the continued action induced by ergot.

An objection to the use of quinine has been urged on account of the slowness of its action. My experience is that from the moment of its administration until it acts, the time is comparatively short—from twenty minutes to half an hour being all that is generally required. In thirty-two* cases reported by Dr. Albert H. Smith, of Philadelphia, in which quinine was used for inefficient contractions, the average duration of labor was one hour. Many of these were primipara, and a larger proportion than usual had occipito-posterior presentations; and in several of these women, the forceps had been used in previous labors on account of inertia during the second stage. This may be regarded as evidence in some measure that quinine acts with more promptness than other oxytocics.

After the expulsion of the placenta the effect of quinine is to induce a permanent tonic contraction of the uterus, and of all the cases I can find recorded where quinine was used properly, there was no disposition in any of them to hæmorrhage after labor, nor was there a single case of puerperal fever following its use; and in a majority of cases the after-pains were less se-

*In Transactions of the College of Physicians, 1875, 3d series, Vol. I, Dr. Smith records his experience with 42 cases.—EDITOR.

vere. All through the labor, they exhibited less despondency and nervous excitement.

In premature labors it exerts the same influence over the process as it does at full term.

I am satisfied from the number of cases reported, and from the indiscriminate use of quinine in malarial districts, that it will not provoke an abortion, nor does it have any appreciable effect upon the womb when in a quiescent state. I have given it to negro women in fifteen-grain doses, who said that they were *in that fix*, not for the purpose of gratifying their wish to abort, but to test the virtue of quinine for this purpose, without effect.

The dose of this valuable drug as a uterine motor stimulant is ten to fifteen grains, given at the onset of labor. In the majority of cases reported, fifteen grains were given at once. I have found ten grains to answer. In no case was there any unpleasant effect after its use; on the contrary, it had a pleasant, exhilarating influence.

In this connection, I will report the case of an old primipara :

Fannie Armstrong, colored, age 35, was delivered at full term, after a prolonged and tedious labor of fourteen hours, Dr. H. in attendance. The delivery was effected about 4 o'clock in the morning—placenta and membranes coming away entire; flooding began immediately. The doctor used all available means to produce a contraction of the flabby uterus—such as the introduction of his hand into the womb, grasping, kneading and squeezing the womb through the abdominal parieties, the application of ice to the abdomen over the womb, large doses of fluid extract of ergot given at short intervals, four hypodermic injections of ergot in as many different locations over the body—but all to no avail. The husband came for me about 6 o'clock. She had then been flooding two hours. When I saw the case, she was, to all appearance, dead or dying; no pulse; a cold, clammy perspiration; unable to articulate; could raise neither hand nor foot, so completely exhausted was she, and still flooding, with no indication of the womb contracting. I immediately injected hypodermically into the arm and thigh each about gr. iij of quinine, dissolved in water by the aid of dilute sulphuric acid, and in less than five minutes the womb had contracted firmly, the flooding ceased, and in ten minutes her pulse had returned, and in the course of an hour she was able to move any or all her limbs, and expressed herself with some confidence that

she felt better, and did recover. Her child lived six weeks. Three months was required to cure the ulcers produced by the injection of ergot. The quinine injection produced an ulcer on the arm, but none on the thigh.

In her second confinement, which occurred about eighteen months after the first, she died from post partum hæmorrhage, as I learned from another physician who attended her.

I might report quite a number of cases where the use of quinine has done me inestimable service in exciting uterine contractions, but it would consume too much of your valuable time to report them at length, and a synopsis would not do justice to the remedy. Discussion of the subject would, I doubt not, bring some measure of confirmation from the experience of other members of this Society in the use of quinine as an oxytocic; at the same time, I feel called upon to ask you to withhold your decision until you have made fair trial of the article. This subject is now ripe for discussion.

ART. IV.—*Typho-Malarial Fever, with Reports of Cases.* By
JEFF. D. WILLIAMS, M. D., Philadelphia, Miss.

In typho-malarial fever, some of the more prominent symptoms of typhoid fever—especially those indicative of abdominal lesions, such as tenderness over the right ileo-cæcal region, tympanites, and diarrhœa—are intermingled with those of periodical or malarial fever. I may say, however, that diarrhœa is not an absolutely essential condition in typho-malarial fever, although it is an essential condition in typhoid fever—ulceration of Peyer's glands being a necessary consequence in typhoid fever. Again, in the last stage of intestinal tuberculosis, there is a diarrhœa, which is also due to ulceration of Peyer's glands; but the pathological lesions of the glands in this disease and typho-malarial and typhoid fever as well, are strikingly characteristic. In typho-malarial fever, and in typhoid fever, the ulceration is longitudinal as regards the intestine, while in tuberculosis of the bowels affecting this region, the ulcerations are circular in their arrangement—following the course of the blood vessels.

A chill is one of the most constant attendants upon the formal access of typho-malarial fever; this is followed by more

or less heat of the skin. Pulse generally accelerated—ranging from 85 to 140; respiration may be disturbed—sometimes attended by cough; however, the sputa are generally small in quantity, unless from complication of pneumonia. Bronchitis is often present. Suppuration of the parotid glands sometimes occurs. Pain in head is one of the most common symptoms, attended with pain in back and limbs. Nausea and vomiting are frequently present. The appearance of the countenance is peculiar, seemingly dull, listless and vacant. Drowsiness and stupor are characteristic. I have noticed my patients to be indifferent and seemingly timid, at times, while again they were impatient and irritable. Dimness of vision; foul, dry, red and more or less pointed tongue; loss of appetite are prominent symptoms. Deafness is almost always complained of throughout the whole attack. About the second week, an eruption makes its appearance. This eruption is not so bright as the rose-colored eruption of typhoid. It has more of a brownish appearance; the papules are not quite so isolated—although confined mostly to the trunk. They will not always disappear on pressure. The stools are of a yellowish color—liquid and somewhat turbid, and have an alkaline reaction; hence, the old theory of an acid treatment. Diarrhoea may be considered a prominent symptom in proportion, as the intestinal lesions are extensive. We almost always find tenderness of the whole extent of the bowels, with gurgling in the iliac region—especially the ileo-cæcal region. In fact, most of the symptoms peculiar to typhoid fever, are present in this disease. I sometimes think that *typho-malarial* is a misnomer, that it is only a milder form of typhoid. The profession has too many names for disease, any way.

This hurried sketch is given in order that I may speak more at length regarding the *treatment* of the disease.

The most essential points in the treatment of this disease consist in controlling the bowel trouble, and in giving plenty of good nutrition and stimulants, especially in the latter stages of the disease. To control the bowel symptoms, I find nothing more excellent than subnitrate of bismuth and Dover's powders, unless the diarrhoea becomes excessive, when I employ an electuary of pulverized opium, acetate of lead, subnitrate of bismuth, and glycerine, and use as an injection. When the tongue is

very red and dry, denoting much inflammation of the bowels, I give a strong solution of chlorate of potash—most emphatically the best remedy for this condition. We are familiar with its virtues as a therapeutic agent in the treatment of all local inflammations of the mucous membrane. When given internally we can detect it in the urine in less time than fifteen minutes. I have used this remedy when the bowels were enormously distended, tongue dry, red and pointed, and in less time than twelve hours—sometimes even within six hours—have denoted a change in the appearance of the tongue; it becomes pale and moist; the tympanitic distension of the bowels is relieved, and the general symptoms denoting inflammation become more favorable. Chlorate of potash comes in direct contact with the inflamed mucous membrane of the bowels, and especially the Peyerian glands. Modern physiologists direct our attention to the fact that these glands are the beginning of the lymphatic system in the intestinal canal, although formerly their function or purpose was not known. Flaxseed poultices act well when the bowels are much distended, although sometimes we are compelled to make use of a blister. Turpentine should not be used, from the fact that it so frequently disorders the stomach. I do not think it does any good whatever, unless in getting rid of the gas; then, also, there is danger of its causing strangury. Quinine is of no therapeutic value in the treatment of this disease; in fact, I believe it tends to aggravate the symptoms. Sleep must be had, and for this purpose, I always prescribe hydrate of chloral and bromide of potassium in combination. This combination acts much better than sulphate of morphia, as it generally produces a dreamless, refreshing slumber; I sometimes use camphor-chloral. When the temperature is very high, pulse full and weak, I use Norwood's tinct. verat. viride, the most reliable of all the arterial sedatives. During the febrile stage, I frequently make use of spts. nitr. dulc. as a diuretic, alternating it with the neutral mixture of the Dispensatory. But as I said before, we have no specific treatment for this disease. We can but aid Nature, and clinical experience has taught me that the remedial agents I have mentioned above, are among the best our profession have, as yet, discovered.

Last Summer and Fall, I treated twenty-four cases of this form of fever, and all recovered save one, a little child of Mr. J. C. Gully, three or four years of age, in whose right lung pneumonia developed on the 25th day—died four days after. I kept notes of all my cases. I submit imperfect notes of only one, as all were treated very much in the same manner.

Mrs. F. G., æt. 37. I was called to see her *September 9th, 1876*; found her with high fever and very despondent. She gave the following history: Had been feeling “badly” for several weeks; loss of appetite, pain in head and neck, aching of extremities, diarrhœa for about a week, with nausea and vomiting of a greenish looking liquid. Had been indifferent about her household duties for some time; inability to sleep or rest in any position; she had a chill in the beginning of her attack, but thought it was from cold; was even then suffering from neuralgia; said she was subject to “sick headache.” Not noting the case carefully, I prescribed, perhaps unwisely, a mercurial purge in the form of calomel, extracted two decayed molar teeth, left an opiate, and promised to call next morning.

September 10. Patient rested well through the night. Fever, seemingly, almost subsided. R. sulph. quinia in 3 gr. doses, every four hours; $\frac{1}{4}$ gr. sulph. morphia at bed time, and repeat this in an hour and half, if not resting.

September 11. Rested badly. Violent nausea and vomiting. Said sulph. morphia always effected her in this manner. Supposing there to be some idiosyncrasy contra-indicating the administration of morphia, I prescribed—R. Chloral hydrate, grs. xliij.; bromide of potassium, grs. lxx; aqua ʒiij; alb. sacch, q. s. to make a syrup. M. et sig: Tablespoonful every two hours until she is asleep.

September 12. Found patient in a hysterical condition. Said she was still suffering with neuralgia. Tongue red, dry, and thickly coated. Bowels slightly tympanitic, with iliac gurgling. Prescribed R Chlorate potash, ʒss.; aqua ʒviij. M. et sig: Teaspoonful every three hours. Ordered meal poultice over bowels.

September 13. Went to stool two or three times during the night; otherwise rested well. R. Subnit. bismuth, ʒiij; Dover's powders, ʒj. M.: Divide into six papers. Sig.: one every three hours. Discontinued quinine.

September 14. Doing well. Prescribed milk punch and beef tea. Noticed an eruption of a brownish appearance over the body. Tongue becoming pale.

September 15. Rested well. Pulse 97, soft. Complained of deafness. Continued treatment.

September 16, 17 and 18. No marked change.

September 19 and 20. Observed peculiar listless appearance of countenance. Very nervous; complained of intense pain in head and neck, and intolerance of light. Appetite entirely gone. Said she could not bear the milk punch any longer. Prescribed egg-nog instead.

September 21, 22 and 23. Temperature 104°F. Great thirst; urine high-colored. Prescribed tablespoonful of the neutral mixture of Dispensatory, alternated with teaspoonful doses of spts. nit. dulc. Continuance of general treatment, except chlorate of potash.

September 24, 25 and 26. Diarrhœa urgent, tympanites of bowels, with gurgling in ileo-cœcal region; tongue thick, dry and red. Prescribed subnitrate bismuth and Dover's powders for diarrhœa, and ordered continuance of chlorate of potash, with flaxseed poultice over bowels.

September 27, 28 and 29. Patient very despondent. Pulse accelerated. Tongue foul, but not so red; diarrhœa urgent, with considerable amount of blood. Bowels enormously distended. Gave her an enema of opium, acetate lead, subnitrate of bismuth, and glycerine. Ordered mustard poultice over bowels.

September 30. No change notable. Prescribed another enema.

October 1, 2 and 3. Bowels greatly tympanitic; mouth dry; tongue tremulous. Blister over bowels.

October 4, 5 and 6. Some better. Bowels not acted since 3d. Continue general treatment.

October 7. Found patient almost in comatose condition. Diarrhœa commenced again. Prescribed full doses of brandy and carbonate of ammonia. Gave another enema.

October 8 and 9. Much better. Fever almost entirely subsided. Ordered continuance of stimulants and good nutrition generally, and patient continued improving up to time of convalescence. Dismissed her on October 14th. Convalescence, as usual, was protracted.

Influence of Posture on Women is the title of a series of articles by J. H. Aveling, M. D., of Dublin, of great practical interest being published in the *Obstetrical Journal of Great Britain and Ireland*. Mr. Henry C. Lea, publisher, Philadelphia, Pa.

ART. V.—*Morphia and Veratrum Viride in the Treatment of Peritonitis. Puerperal and Non-Puerperal.* By THOS. LIPSCOMB, M. D., Shelbyville, Tenn.

CASE I.—*Acute Peritonitis.*—July 15, 1874. Was called up during the night to see A. P. F., a little girl, aged 4 years. She had high fever, intense pain in the abdomen, with much tenderness on pressure. As the bowels had been freely moved the preceding day, and she had taken only a little bread and tea for supper, it seemed manifest that no further evacuation of the bowels would prove beneficial. Perfect quietude, if attainable, seeming to be indicated, I prescribed pulv. Doveri, gr. iiss, to be repeated at intervals of two hours until pain was relieved; also warm poultice to be applied over the whole abdomen.

16th, A. M. Called, and found the treatment prescribed had failed to give relief. Fever still high; pulse, 135; tenderness of abdomen increased; skin hot and dry; much thirst; abdomen becoming tympanitic; every symptom of acute peritonitis is present. R. Tinct. veratrum viride, gtt. ij, every three hours, with $\frac{1}{10}$ th grain of sulph. morphia at the intermediate hour between the doses of veratrum viride; warm applications to abdomen. At noon, I found the symptoms unchanged. Continue treatment. At 7 P. M., the severity of the symptoms was unabated; tympanites increased. Morphia was inducing so much irritation of the skin that it became necessary to substitute 4-gr. doses of pulv. Doveri; still alternating with the tinct. veratrum, which was increased to gtt. iiss, and then to iij. The whole abdomen is to be covered with an epispastic. The pulv. Doveri had a better effect, producing no itching, but soothing the patient, and securing more rest. The remedies were given regularly, one or the other, every hour and a half when awake; if asleep she was not to be disturbed. This rule was observed to guard against excessive narcotism. But notwithstanding the large amount given, the regularity of administration was seldom interrupted by sound sleep.

17th. Epispastic had drawn well; patient rested well; skin was soft; abdomen not so hard and tense. Continue treatment.

Not deeming it necessary to give in detail the symptoms from day to day, I may yet say that the same line of treatment was continued through the 18th, 19th, 20th and 21st, with a very gradual yielding of the symptoms; fever slowly abating; abdominal tenderness and tympany subsiding; and by the 20th the interval between the doses of medicine was prolonged to two hours; on 21st, to two and a-half hours; on 22d, to three hours;

and on the 23d, quinine was added to the treatment—warm emollient poultices being continued uninterruptedly until fever and tenderness disappeared. Other tonics were indicated and used during recovery, which was not rapid, but resulted in perfect restoration to health.

CASE II.—*Metro-Peritonitis, or Puerperal Peritonitis.* Sept. 27, 1876, was called to see Mrs. L. P., aged 18 years, white, who, four days previously, had been delivered of her first child; breech presentation. There was increased difficulty of labor in consequence, but it was not unusually protracted. Both mother and child did well until the evening previous to my visit, when the mother was permitted to get out of the bed and walk to the fire over an uncarpeted floor, and sat up there until her bed was made up. Some time during the night, she woke with a high fever, attended with pain in the left iliac region, in which condition I found her. Pulse from 125 to 130; skin hot and dry; pain continuing with a diffused tenderness, extending from seat of pain across the inferior left half of abdomen, revealing clearly the beginning of metro-peritonitis. The lochial and lacteal secretions were not entirely arrested, but the amount of secretion was diminished. Treatment was immediately commenced by administering $\frac{1}{4}$ grain of sulph. morphia, to be repeated every three hours, and gtt. vj of tinct. veratrum viride at mid hours between the doses of the anodynes—the veratrum to be increased gtt. ss each dose until fever abated or sickness of stomach occurred. Continued application of warm bran poultices to abdomen.

4 P. M. Although four miles from my residence, visited Mrs. P. again. Symptoms but little changed. Continue treatment.

25th A. M. Found Mrs. P's condition about the same it was yesterday afternoon. Fever high; skin hot and dry; abdominal tenderness unabated. Continue treatment, with grain doses of sulph. morphia at same intervals, with veratrum midway between, in doses of from gtt. vj to viij, according to the condition and rate of pulse, and the tolerance of the stomach, for occasionally it produces sickness of stomach. For this reason, as well as because of a relaxed and perspirable condition of the skin, the veratrum was sometimes given in smaller quantities.

4 P. M. Visited Mrs. P.; found pulse diminished in frequency; skin soft; she was free from pain, and was disposed to sleep, but usually she awoke often enough to take the medicine with regularity.

29th A. M. Mrs. P. was comfortable; had slept a good deal; fever abated; tenderness diminished; prescribed same treatment, with the addition of sulph. quinia gr. ij, to be given with

each dose of morphia, unless there be an increase of fever, when the quinia is to be withheld, although the morphia and tincture veratrum are to be continued as before. The quinine was added because it was our malarial season, and every case of sickness seemed more or less impressed with malarial poison.

30th, A. M. Mrs. P. rested well during day and night; pulse less frequent; skin moist; abdomen less tender. Continue treatment, with addition of spirits nitre dulcis, to increase renal secretion. Increase intervals between anodynes to four hours, and alternate with veratrum viride regularly.

Oct. 1, A. M. Still improving. Continue treatment.

2d, A. M. Happily convalescing; secretion of milk restored; directed intervals between anodynes and veratrum to be still further prolonged, and quinine to be kept up regularly.

The case continued to improve until the night of the 14th, when, apparently from a sudden lowering of temperature in the weather, fever returned, with return of pain and tenderness in the region recently involved.

On the 15th, found the same symptoms present. Apply cups to the tender portion of abdomen; after which apply an epispastic, and administer full anodyne doses of Dover's powders and morphia, alternated with tinct. veratrum viride.

16th. Epispastic had acted well; skin relaxed; fever and tenderness much abated. Continue treatment, under the influence of which the fever subsided during that day and night; and, without notable interruption, the case progressed to perfect recovery.

Remarks.—The question may very pertinently be asked why report the foregoing cases? what special interest attaches to them? We reply that a disease of such severity and such danger as acute peritonitis—especially puerperal peritonitis—and one involving such painfully interesting concomitants can scarcely be thought of, or written about, beyond its grave importance. Again, the treatment of acute peritonitis—puerperal or non-puerperal—mainly by the combined influence of large doses of morphia and tincture of veratrum viride, may not be generally known or recognized by the profession. To such as are not familiar with this method of treatment, the amount of opiates given would be startling, and doubtless considered as hazardous and unjustifiable. And but for the intensity of irritation attending peritonitis, such opinions and inferences would be just and correct. But that intense irritation, for the control of which those enormous doses are given, renders them innoc-

uous and most salutary; and when the opiate is alternated with veratrum viride, it constitutes the most efficient means within our reach for meeting plain and urgent indications before us, and for staying the fearful progress of a disease which, if unchecked, hurries with fearful rapidity to a fatal issue. With our present enlightenment, we have not in the whole materia medica two other agents the known and recognized properties of which so well adapt them to meet and control the indications and meet the therapeutic necessities of puerperal or non-puerperal peritonitis, as morphia and veratrum viride.

The little girl who is the subject of the first case, had been tenderly raised by parents in good circumstances. She was of the nervo-sanguine temperament, and from a mother deeply tainted with the strumous diathesis. A little calculation will show that she took the equivalent of about 80 drops of tincture of opium each twenty-four hours.

Having been long engaged in the practice of medicine and not infrequently called to cases of puerperal peritonitis, and yet not seeing many of them until too late for free blood-letting to avail, according to the late Alexander Gordon, of Aberdeen; and even if called in early, death but too often closed the sad scene—in view of these things I was led to make close study of the disease, and the inefficiency of the most approved methods of treatment of it. In the meantime, I saw a notice of Professor A. Clark's (then of Buffalo, N. Y.) recommendation of large doses of morphia in this disease. On reflection I concluded to try the combined agency of morphia and veratrum viride; and during the winter of 1866 and '67 I treated successfully two cases by this method. Both were well marked cases, and one of them was of unusual severity. The two cases were reported in the April number (1867) of the *Nashville Journal of Medicine and Surgery*, with an elaboration of my views of the pathology and treatment of the disease. In April, 1874, I reported three other cases of pureperal peritonitis and one of acute non-purperal peritonitis to the Tennessee Medical Society at its annual meeting in Chatanooga in April, with extended remarks. The treatment was successful in each of the cases. These cases were also published in the *Nashville Journal*.

I claim priority in giving publicity to this treatment of peritonitis. The late Professor Hodge said to me, in reply to a letter addressed to him, that the anodyne treatment had been tried and failed, and that he knew nothing about veratrum.

While I use the two articles in each case and regard the agency of each as indispensable, I regard them in a certain view as somewhat antagonistic, viz.: the system is much more tolerant of veratrum viride when alternated with full anodynes than when given alone, and its peculiar effect on the pulse is not so quickly manifested; whether the veratrum to any extent counteracts or prevents the narcotic effect of the morphia, I am not prepared to decide. In the use of remedies of such potency, in the large doses recommended, we should be certain that we have peritonitis to treat; if puerperal peritonitis, the doses should be larger than in non-puerperal, owing to the peculiar excitability of the lying-in woman. In genuine puerperal peritonitis, I never give less than one grain of morphia every three hours until sleep is induced, with general softening of the skin, giving all the time veratrum viride between the doses of morphia, beginning with five or six drops and increasing regularly until sickness is induced or the pulse and fever reduced.

The only precaution taken to guard against excessive narcotism is to direct the nurse not to awake the patient if asleep for the purpose of giving the medicine at the regular intervals. And although I sometimes find it necessary to give as much as a grain and a fourth of morphia instead of a grain at each dose, the patients are seldom sleeping so much as to materially interfere with the regularity of administration—not often missing more than one dose in twenty-four hours until the force of the disease abates, and then the intervals ought to be somewhat prolonged.

I have said nothing about purgatives. Recognizing the fact that all irritated or inflamed tissue should be permitted to rest until relieved, we give no cathartics. You cannot increase the peristaltic action of the bowels without exciting and disturbing the peritoneum. In our obstetrical practice we direct that every woman be permitted three full days of rest from aperients after delivery, and if peritonitis ensue give rest until relieved.

At one period, very early and free blood-letting might have

been the best treatment, as the late Professor Hodge expressed the opinion that even pureperal fever was more adynamic than formerly. But according to my view of the pathology of the disease and the necessity of rest, the treatment of the disease by purgatives was assuredly wrong. Indeed the only fatal case I have treated since the adoption of the present method, seemed to result from the untimely administration of a full dose of castor oil and spirits of turpentine given through the unreasonable importunity and officiousness of friends in their anxiety to have the bowels moved. Every symptom was aggravated by the consequent disturbance of the bowels, and the promising condition of the patient previous to giving the oil and turpentine was never restored.

Clinical Reports.

*Angina Pectoris due to Heart-Clot—Embolism—Death—Remarks.** GAVIN RAWLS M. D., Carrsville, Va.

Aug. 11, 1876. J. W., æt. 56 years, a few hours ago was taken with a dull pain in the præcordia, which has increased in violence and is now nearly intolerable. Pulse 100. There are darting pains and numbness of the left arm; no pallor of face; on the contrary, preternatural redness; dyspnoea. Never had one of these attacks before, though he has complained at times of a "shortness of breath," especially after excitement or violent exercise. On auscultation no sign of valvular or other organic lesion can be detected. I directed hot pediluvia, sinapism over the præcordia, and anodynes internally. After using all the various anodynes to which I had access, including morphia, Hoffman's anodyne, belladonna, chloroform internally, aconite, etc., and failing to get relief, I applied a fly blister, 4×5

*NOTE BY EDITOR.—We have been somewhat at a loss in giving a fully expressive title to the report of this interesting case. Dr. M. L. James, Lecturer on Practice of Medicine in Medical College of Virginia, has recently narrated to us reports of three cases in which he was able to diagnose, months before death, the presence of heart-clots—the correctness of the diagnoses being verified by autopsies. The report above given by Dr. Rawls of his case, however, bears so little resemblance to the reports given by Dr. James of his cases, that we are unwilling to give a more definite title to the case now reported. But we will not anticipate the reports of Dr. James' cases, as he promises a full detail of them in the *Monthly* at an early day. These cases of Dr. James are of great interest, in that the available literature on the subject is exceedingly meagre—if, indeed, there be any. Should any reader of this note be aware of any case of heart-clot, in which diagnosis was satisfactorily determined weeks or months before death, he will confer a favor upon us by communicating with Dr. James, Richmond, Va.

inches, over the heart, and sent for Dr. T. H. Barnes in consultation.

6 *P. M.* Dr. B. concurs in my diagnosis of angina. Pulse 130, and weak; the rhythm of the heart sounds is somewhat interrupted; pain is less, but is still agonizing. *R.* Potass. bromid, $\mathfrak{z}\text{i}$.; *Tinct. aconit radicis*, m. xxxvi; *Tinct. digitalis*, $\mathfrak{z}\text{i}$; *Aq.*, $\mathfrak{z}\text{iss}$. *M. S.*, one teaspoonful every three hours; also one-sixth grain of morphia by hypodermic injection; external applications continued.

12th. *A. M.* Patient complains of but little pain, but of great dyspnœa, and keeps two men fanning him. Pulse 100, very feeble. The heart has lost its rhythm completely, and its beat is feeble and almost inaudible. The stomach is quite irritable—the patient vomiting nearly everything he takes. Continued same treatment, with the addition of 2 grs. quinine every two hours. *Evening*—condition unaltered.

13th. Pulse 110; patient free from pain; the dyspnœa and gastric irritability continue very distressing; rhythm of the heart still absent, and the sounds nearly inaudible. Discontinued other remedies. *R.* *Spts. lavender. comp.*, *spts. æther. nitrosi* aa $\mathfrak{z}\text{ss}$. *M. S.* Half teaspoonful every two hours. *R.* *Hydrarg. submur.*, grs. iij, *morphia sulph.*, gr. ij. *M. Ft. pil. x.* *S.* One every three hours. Enjoined perfect quiet; only the necessary attendants are allowed in the room.

14th. Condition but little changed. Pulse over 100 and still very feeble, especially on the left side; the sensation of suffocation and nausea continue unabated. The patient begins to show signs of asthenia; owing to the intense irritability of the stomach, he has been able to retain but little nutriment. The rhythm of the heart has begun to return, and the sounds are more distinct. *R.* *Tinct. digitalis*, $\mathfrak{z}\text{i}$, *spts. æth. nit.*, $\mathfrak{z}\text{ij}$., *M.*, *S.* 30 drops every three hours. *R.* *Aromat. spts. ammon.*, 20 drops every two hours; blister to spine, 3×4 inches. Diet, milk, milk-toddy *ad libitum*, soups and other nutritious articles, which should be taken in small quantities, but frequently.

15th. Pulse 100, feeble; auscultation and percussion revealed an emphysematous condition of the chest complete. The heart sounds were nearly natural and quite distinct; dyspnœa and nausea continue, and do not improve *pari passu* with the other symptoms. Same treatment continued.

19th, *A. M.* Patient's condition unchanged from yesterday—emphysema, dyspnœa and nausea continuing.—*P. M.* Dr. Barnes and I were called in great haste. Found the patient suffering greatly with difficulty of breathing, and pain and cramps in the left leg, which was livid and cold; no pulse at the popliteal

space. After continued and persistent treatment, the cramps and pain ceased, though the leg remained blue and cold. On consultation we concluded this new phase of the disease to be due to embolism, the clot having occluded the left femoral or some of its branches. *Night*—Administered morphia hypodermically and insured a good night's rest.

17th, *A. M.* Patient's condition the same; all the symptoms continuing, with signs of asthenia more marked. Continued the ammonia and other stimulants, with the most nutritious diet possible.

Evening. Dr. P. S. Baker, of Suffolk, who had been sent for, arrived, and on a thorough examination of the patient, concurred in our diagnosis and treatment, advising that nitrite of amyl should be used if the angina returned.

18th, *A. M.* The case presents no change. The heart sounds are about natural and quite distinct, the dyspnoea continues along with the gastric irritability. Same treatment continued. 3 *P. M.* For the last few hours the patient has been suffering intensely with general pain over the abdomen, the tenderness being so great that the patient cries out when the bed-clothes touch the abdomen; vague symptoms of cerebral irritation; pulse accelerated slightly. The patient cries loudly for relief from pain. I administered 8 drops of Magendie's solution of morphia into the left shoulder.

19th, *A. M.* The patient dropped to sleep about 7 o'clock the previous evening (four hours after the morphia had been given), from which it has since been impossible to arouse him. The breathing is now labored and slightly stertorous; pulse 145; temperature 103° ; eyes glazed and expressionless, with pupils natural; unconsciousness complete; there is complete loss of deglutition, and the whole right side is paralyzed, he not having used the right arm or leg for several hours. Drs. Barnes and Baker, who had arrived before I did, had applied all available means of stimulation and counter-irritation without avail. The patient continued rapidly to sink, and at 2.30 *P. M.* the respiration was labored, stertorous, gasping; there was complete cyanosis of the face; the paralysis of the right side was complete; the eyes were set in an unconscious, vacant stare; the pulse was wanting at the wrist, and a few minutes later death closed the scene.

Remarks.—Here we have a case of angina, originally, due probably to ossification of the coronary arteries, terminating with heart clot and death; the first clot passing downward on the left side, and the second passing upward on the same side. The abdominal pain experienced the evening before

death was probably reflected from the brain. A most careful examination before the sickness had failed to detect any signs of valvular or other organic lesion, nor could any sign of such lesion be detected during illness. The question arises, What was the cause of the emphysema and the formation of the clots? Was there ossification of the mitral valve at and around its base along with the coronary ossification? If not, what was the cause of the emboli? We are told that heart clot is generally due to one of three things: over-distention of the cavities of the heart from an undue accumulation of blood, hyperinosis, or inopexia. The dyspnœa and nausea seemed to be somewhat paroxysmal, though there was no particular time for the paroxysm; the latter was never alleviated by any remedy we used, and it was probably partly due to dyspepsia, of which the patient was a great sufferer in health. Throughout the attack there was a notable difference in the pulse of the right and left sides, the right being stronger and fuller than the left.

Correspondence.

Salicylic Acid (Reply to Dr. J. D. Roberts).

Mr. Editor,—In your Journal for February, 1877, Dr. J. D. Roberts, of this place, has reported a case of acute rheumatism, treated with salicylic acid, and in conclusion states that, “more recently, Dr. G. M. Roberts and Dr. S. B. Flowers, of this place, have been trying some experiments as to the solution of salicylic acid, and find the following the best for febrile cases: R. Soda bi-carb., salicylic acid \overline{aa} 3iiss, water, sweet spts. nitr., \overline{aa} fʒij.” He puts the query: “Will not the soda in this form render the acid neutral?”

Now, as far as my part of the “experiment” is concerned, I must confess it is not original. This special formula is probably original with Dr. Roberts (G. M.) and myself, but the soda and spirits nitre as solvents for salicylic acid, I am sure, are not. The acetates of soda, potash, and ammonia, are specially recommended as “rendering the acid much more soluble.” The spts.

nitre was recommended by some writer in the *Druggists' Circular* as being capable of dissolving the acid.

Dr. Roberts (J. D.) has not given our formula correctly. Instead of equal quantities of water and spts. nitre, we used only vj of the nitre to a 3vj mixture of the acid-soda solution. This made a very clear solution, and quite palatable, compared with the nauseous compound with glycerin, borax, &c.

I have recently been using a formula thus :

R. Acid salicylic.

Potass. acetat..... aa 3iiss

Spts. ether. nitr..... f3ij

Aquæ distil..... f3vj

Add first the potash gradually to the acid, previously dissolved in the water, and then the spts. nitre.

S: A tablespoonful in a wineglassful of sweetened water every hour, or two hours, according to nature of case.

This has acted happily in a recent case of acute articular rheumatism—reducing the pulse rapidly, relieving the pain in the joints, and bringing about a speedy convalescence. I have not known this combination to produce irritation of stomach, or any of the unpleasant effects sometimes produced by the acid given in other forms.

As to the neutralization of the acid by the soda, or any of the salts of potash or ammonia, I do not think—in equal quantities by weight—that it can be neutralized, as it is not a saturated solution, and therefore not “neutral,” and certainly not *inert*.

S. B. FLOWERS, M. D.

Mt. Olive, N. C., February 24th, '77.

Original Translations.

From French and German.

Salicylic Acid in Acute Rheumatism.—M. Sée has recently delivered a lecture on this subject, an abstract of which we find in *Le Progrès Médical*, December 16th last.

As an antipyretic, M. Sée considers it far inferior to digitalis and sulphate of quinia—the depression of temperature after its administration being less marked and less constant than when either of the latter drugs are employed. The only affection in which it has given satisfactory results is acute articular rheuma-

tism. The dose given by M. Sée is about seven and a half grains every hour. When given in solution, it should be remembered that while it is soluble in alcohol, it is quite insoluble in water.

Few medicines are eliminated more rapidly than this. In a very short time after its administration it can be detected in the urine in the following manner: To a very weak solution of perchloride of iron in a test-tube, add a few drops of the urine, and a beautiful violet precipitate will be formed. The reaction giving rise to this precipitate is not known. In consequence of its rapid elimination, it is necessary to give it in small doses at short intervals.

M. Sée has tried it in five patients suffering with acute rheumatism of the larger joints. In every case on the second day the pain and swelling had either entirely disappeared or greatly diminished. In one of the cases the treatment was suspended on the fourth day, the patient appearing cured; but a relapse occurred, from which he promptly recovered when the medicine was resumed. None of the patients had any cardiac trouble at any time during the treatment. Two suffered from symptoms of intolerance of the medicine, such as constant headache, insomnia and roaring in the ears.

[The translator has recently used hydrobromic acid as recommended by Fothergill for these symptoms when caused by quinine, with the happiest results, and it is highly probable it would act well when given with salicylic acid.]

The close connection which evidently exists between rheumatism and chorea induced M. Sée to try salicylic acid in this affection. A patient, seventeen years of age, suffering from slight chorea, was subjected to the same treatment as the rheumatic patients. On the second day, she had headache and ringing in the ears and then a slight rise of fever, the cause of which was unknown. The treatment was suspended and the fever disappeared on the second day, when it was observed that the choreic movements were less marked. Whether this result was due to the medicine or the fever, M. Sée would not pretend to say.

Apoplectiform Attack in an Hysterical Patient—Hemi-Anæsthesia without Motor Paralysis—Œsophogismus—Suppression of Urine—Death.—(*La Tribune Médical*, December, 17th, 1876.)—This singular case is reported by M. Chaulet, Jr. The patient was a robust woman about fifty years of age, who suddenly lost consciousness after having first complained of feeling badly, and vomiting. When seen by Dr. Chaulet, her expression was one of great lassitude; eyes widely opened, pupils dilated. Answers to questions could only be obtained with difficulty. The pulse was regular; extremities cold. But what was most striking,

was the difficulty which the patient experienced in swallowing, her voice having, at the same time, a hollow sound. She was greatly agitated. Auscultation revealed nothing abnormal about the heart and lungs; and there was no history of any affection of the stomach. There was no paralysis except an anæsthesia of the left side of the body (to which we will return presently); no deviation of the face or tongue, and from what could be learned it was evident that the attack had not come on like epilepsy. For some years past she had been subject to nervous attacks, during which her husband said she looked as if she was dead; or if conscious, complained chiefly of feeling as if there were a ball in her throat. She had suffered from leucorrhœa, about three years ago, but had never been treated for any uterine affection. Her menses had ceased about four years ago, and since that time her nervous attacks have been less frequent and usually less severe. The treatment prescribed by Dr Chaulet consisted in the use of valerianate of zinc and cold affusions.

The next day her condition was much the same. She recognized Dr. Chaulet and called his name, but answered his questions with hesitation. Her speech was not affected as in hemiplegia, but the voice was very hollow and monotonous in its tones. There was not the slightest difficulty of motion, and both hands could be used perfectly. There was anæsthesia on the left side of the body. The pupils were always greatly dilated. The difficulty of swallowing persisted, and the next day she was very much worse, so that whenever swallowing was attempted suffocation seemed imminent. About $\frac{1}{4}$ th of a grain of muriate of morphia was injected hypodermically, but no relief was obtained. This was on the 14th.

On the 15th, the symptoms still persisted. The patient was perfectly rational and made her will. The same treatment was continued.

On the 16th, in addition to the other symptoms, suppression of urine was also observed. During the 17th and 18th, the symptoms became gradually worse and death occurred on the morning of the 19th. [Unfortunately there is no record of the temperature in this very interesting case.—TRANSLATOR.]

Carbolized Camphor as a Dressing for Wounds.—An article on this subject has recently appeared in the *Bulletin de Thérapeutique*, written by M. Soulez. Carbolized camphor is formed by first dissolving 9 grammes of carbolic acid in 1 gramme of alcohol; and then adding 1 gramme of the solution thus obtained to $2\frac{1}{2}$ grammes of pulverized camphor. This forms a mixture which he used as a dressing for wounds. It is an oleaginous liquid of pale yellow color and a feeble odor of camphor.

It does not mix with either water or glycerine; but mixes in all proportions with olive oil and oil of almonds. A mixture of equal parts of the carbolated camphor and tincture of saponaria makes a very good preparation, and, indeed, M. Soulez gives the preference to the emulsion thus formed.

The articles necessary for the dressing are (1) wadding cut in squares of different sizes; (2) thin leaves of caoutchouc; and (3) bandages. The square of wadding to be used is impregnated by pressure with the mixture of carbolated camphor and olive oil. It should be sufficiently large to cover the wound completely and even extend beyond its borders. This first piece of wadding is covered successively by six others prepared in a similar manner. The upper one should project slightly over those beneath. A piece of thin rubber is then placed over all these to prevent evaporation; then another layer of wadding is applied, and finally the bandage over all. Every wound, of whatever nature, is always to be bathed in the carbolated camphor before the dressing is applied.

M. Soulez claims for this mode of treatment all the advantages of the modes of dressing recommended by Guérin and Lister without any of their disadvantages. As a general thing a new dressing is applied every six days, but sometimes ten days elapse before they are removed. Not the slightest irritation of the skin or other ill effects have been observed which could be attributed to the dressing. The special advantages claimed are: (1) Diminution in the amount of reaction after grave operations; (2) absence or diminution of pain; (3) slight suppuration.

The Therapeutic Action of Phosphide of Zinc.—From an article on this subject by Vigier (*Rundschau* for January, 1877, and *Bullet. Général de Thérap.*, 45 I, 1876), we take the following:

Phosphide of zinc has been found of benefit in nervous affections with excessive discharge of phosphates, in those cases where the nutrition of the brain seems to be at fault, in spinal irritation, hysteria, and various forms of paralysis. In Ireland it has been highly extolled for scrofula; in England for neuralgia, as well as paralysis agitans, sciatica, in the collapse of typhus fever, in chronic diseases of the nervous system, and in various depressed states of the system. When given as a tonic in doses of one or two milligrammes, or as a stimulant in doses of five milligrammes daily, after a few days it improves the appetite, accelerates the pulse, excites the nervous system, and increases the secretion of urine. In large doses, it causes functional irritation of the sexual organs. In a paper read before the Obstetrical Society of London, Dr. Routh strongly recom-

mended the use of phosphide of zinc in chlorosis, anæmia and uterine hæmorrhages [menorrhagia?]. Dr. Ashburton Thompson coincided with him in his statements on this subject.

The dose recommended by the majority of writers on the subject is from two to four pills a day, each pill containing four milligrammes (about $\frac{1}{16}$ th grain) of the phosphide of zinc. Gue-neau de Mussy, Vigier and others have found this quantity amply sufficient to cause decided benefit in chloro-anæmia, metro-rhagia, hysteria and amenorrhœa. [The translator has used it with very gratifying success in several cases of hysteria, one of which had proved rebellious to all the usual remedies for such cases. It may be well to call attention just here, too, to a statement of Dr. L. Duncan Bulkley, of New York, who states he has found it one of the very best remedies in herpes zoster.]

The Active Principles of Drugs and Their Doses.—A short article on this subject appeared in *La Tribune Médicale* for January 7th, 1877, from which we extract the following table of doses, which will be found of interest:

In the first table, are placed those medicines which are given in *very* small quantity; and in the second, those which admit of being used more freely:

I.—Maximum Doses in Twenty-four Hours.

Alkaloids or Active Principles.	Milli-grammes.	Grains, (about)	Alkaloids or Active Principles.	Milli-grammes.	Grains, (about)
Atropine	1 to 4	$\frac{1}{66}$ to $\frac{1}{16}$	Hyoscyamine...	2 to 5	$\frac{1}{33}$ to $\frac{1}{3}$
Sulph. of atropia	1 to 4	$\frac{1}{66}$ to $\frac{1}{16}$	Daturine	$\frac{1}{2}$ to 3	$\frac{1}{132}$ to $\frac{1}{32}$
Digitaline	2 to 10	$\frac{1}{33}$ to $\frac{1}{7}$	Curarine.....	$\frac{1}{4}$ to 2	$\frac{1}{66}$ to $\frac{1}{33}$
Aconitine.....	$\frac{1}{4}$	$\frac{1}{266}$	Nicotine	$\frac{1}{2}$ to 3	$\frac{1}{132}$ to $\frac{1}{22}$
Eserine.....	$\frac{1}{4}$ to 2	$\frac{1}{266}$ to $\frac{1}{33}$			

II.—Maximum Doses in Twenty-four Hours.

Active Principles.	Centi-grammes.	Grains, (about)	Active Principles.	Centi-grammes.	Grains, (about)
Morphine & its salts....	1 to 10	$\frac{1}{6}$ to $1\frac{1}{2}$	Santonine.....	5 to 30	$\frac{5}{6}$ to 5
Codinine.....	2 to 10	$\frac{1}{3}$ to $1\frac{1}{2}$	Conicine.....	1 to 10	$\frac{1}{6}$ to $1\frac{2}{3}$
Narcocine....	3 to 15	$\frac{1}{2}$ to $2\frac{1}{2}$	Veratrine.....	1 to 3	$\frac{1}{6}$ to $\frac{1}{2}$
Quinine.....	25 to 1gr	4 to 15	Strychnine.....	1 to 3	$\frac{1}{6}$ to $\frac{1}{2}$
Caffeine.....	20 to 50	$3\frac{1}{3}$ to $8\frac{1}{3}$	Haschischine..	2 to 10	$\frac{1}{3}$ to $1\frac{2}{3}$

Inhalations of Carbolic Acid for Catarrh of the Respiratory Organs.—(*St. Petersb. Med. Wochenschrift*, November 11, 1876.) A discussion recently took place on this subject among the physicians of St. Petersburg, which was published in the above-mentioned journal, and subsequently in the *Allg. Wien. Med. Zeitung*, from which we take the following:

Dr. Moritz stated during the last four years he had repeatedly used carbolic acid, especially in the form of spray or vapor for bronchial catarrh; and when used *very early*, in the very commencement of the attack, it often causes it to abort, while at a later stage it checks its further development. He places half a pound of a two per cent. solution of carbolic acid in a very small room in which the patient is confined, and the evaporation of this is sufficient for the day. The same procedure is repeated at night. The first cases in which he used it were those of two children supposed to be suffering from the premonitory symptoms of whooping-cough. After this treatment had been practised two days, there was only a slight catarrh present, which was entirely well in a few days. In a number of children suffering with measles the medicine greatly relieved their cough and enabled them to rest far more comfortably at night. Two phthisical patients, on the contrary, one of whom had large cavities in the lungs, bore the treatment very badly. Dr. M. remarked further on the use of coal oil, (Gazööl) which had formerly been tried in St. Petersburg, and with some success in whooping-cough. This contains both ammonia and carbolic acid—the former of which was too irritating to be desirable. He thought the favorable action of the carbolic acid was due to the fact that many catarrhs were, in a certain stage, infectious, most probably, indeed, due to parasites. He stated that it is a well known fact, they are produced under the conditions favorable to the propagation of the infectious diseases.

Dr. von Mayer took exceptions to his statement, and was fearful that this theory would be carried too far. He said where bronchial catarrh was infectious, it was to be considered due to catalytic action. He had used coal oil (Gazööl) in cases of spasmodic cough, especially whooping-cough, with decided benefit.

Dr. Lehwiss had found snuffing up a solution of carbolic acid very beneficial, as well as its use as an injection.

Dr. Massing had used the carbol inhalation in a very severe case of whooping-cough, which had lasted for three months, with the most satisfactory result. He caused a sort of tent to be constructed over the bed of the child, so that the inhalation might be practised more readily.

Analyses, Selections, &c.

Differential Indications for the Use of the Faradic and Galvanic Currents.—Dr. A. D. Rockwell, of New York, read a

valuable paper on this subject, before the New York Medical Journal Association, November, 1876, which is published in the *New York Medical Journal*, February, 1877.

The *relative* value of the two currents resolves itself mainly into a question of experience. Both are valuable aids in the treatment of various diseases; both are frequently serviceable in the treatment of the same disease, while in certain conditions the faradic current is alone indicated, and in others the galvanic.

This idea finds its illustration in a number of articles that have appeared during the past year or so, regarding the relation of electricity to pain. The well known power of the galvanic current to relieve many forms of pain is repeatedly emphasized, while the efficacy of the faradic current in the same direction is seldom referred to; hence the inference very naturally is that the latter, for this purpose, is of but little value.

The truth is, that faradism is not only invaluable in many forms of pain, as will be indicated further on, but in certain conditions relieves, where galvanism is not only useless, but worse than useless, since it serves only to exaggerate the existing distress. The simple question of the value of one current, as compared to the other, is therefore worthy of but little consideration; being simply two manifestations of one force, they have each their functions, both as independent and supplemental agents.

The known physical and physiological distinctions of the two currents do indeed afford sufficient data to enable us at times to differentiate with accuracy in the selection of the currents, and the application of certain methods. For example: the faradic current, by virtue probably of its greater mechanical effects, is powerfully tonic in its action, and by the method of general faradization is indicated in many cases of nervous exhaustion, and by localized faradization in the mal-nutrition and atrophy of muscles. The galvanic current, by virtue of its greater power of overcoming resistance, is indicated when we wish to act upon the central nervous system, and, through its superiority in exciting nerve-irritability, we use it to produce contractions in paralyzed muscles that fail to respond to the faradic. So far forth, then, our knowledge of electro-physics and physiology can prove directly serviceable in the adaptation of the proper treatment; but none the less must we, to a very considerable extent, rely upon the aid afforded by repeated clinical observations.

In a practical review of the subject at hand, it seems natural to consider—1. Those diseases, or symptoms of diseases, which seem to demand the faradic current; 2. Those that call for the

galvanic; and, 3. Those in which both are frequently and interchangeably indicated.

1. There are in various generic diseases, if I may so speak, specific symptoms that invariably demand one or the other of the two currents, and even special qualities of current—and to this point allusion will presently be made; but there are few distinct organic or functional conditions that in every phase of their manifestations demand alone and always any special form of electricity.

Asthenopia, a symptom depending on an absolute or relative deficiency of energy in the muscles of accommodation or of the internal recti, and accompanied by hyperæsthesia of the retina and of the ciliary nerves, is about the only distinct disease that seems to demand the faradic current alone. I will not say that galvanism is never serviceable; but my experience, at least, seems to teach that the instances where faradism is not immeasurably superior to galvanism are so exceptional as practically to exclude the latter from consideration.

2. I would designate spinal irritation, certain sequelæ of cerebro-spinal meningitis, and most of those skin affections in which electricity has been shown to be of service, as the distinct diseases in which the galvanic is uniformly superior to the faradic.

3. Those diseases in which either current may prove equally efficacious, or where at one stage of the symptoms the galvanic, and later, the faradic current is indicated.

Paralysis may be said to be the disease for which electricity is *par excellence* the remedy; and yet, as is well known, it is frequently of very little use where the symptoms arise from certain organic conditions; indeed, it may be absolutely contraindicated. In hemiplegia, where there exists, as is so often the case, an exalted electro-muscular contractility, electricity, if used at all, should be used in the form of faradization, and with an exceedingly mild and rapidly interrupted current. Under this treatment, improvement in the symptoms is not unfrequently accelerated—the paralyzed member being stronger, and the muscular contractions less readily produced; and, even when muscular contractions are *somewhat less* readily called out than in the normal condition, the same current is as a rule preferable.

But when, on the contrary, there is a very great diminution, and even, relatively to the faradic current, a complete loss of electro-muscular contractility, the galvanic current is always indicated, the faradic coming into play only when the muscles give evidence of considerable reaction to its influence. In paraplegia, whether depending upon an absolute structural change in the cord, or upon causes that result in simple anæmia or hyperæmia,

we generally find, after a short time, complete or approximate loss of farado-muscular contractility. The galvanic current is alone applicable in these cases, for the specific purpose of restoring nerve-excitability, although the faradic is useful in attempts to improve the impaired nutrition of the paralyzed members.

The difference in the reaction of the two currents is typically illustrated in facial paralysis, and especially when it results from the action of cold (*rheumatismal*) or compression. In these cases the faradic current does not cause contraction, while not only do the muscles respond to the galvanic, but a much weaker current will answer than when the parts are normal. As the patient improves, it takes an increased tension of galvanism to cause the same effects, until finally farado-muscular contractility becomes manifest. This phenomenon has been observed also in traumatic paralysis of the peroneal nerve, and in a case of rheumatismal paralysis of the circumflex nerve. The above as a clinical fact is thoroughly substantiated, but it is interesting to note how it is re-enforced by electro-physiological experiment.

Erb, and after him Ziemssen and Weiss, found that, after the laceration or division of the sciatic nerve in a rabbit, the excitability of the muscles through the first week became diminished for both currents; but subsequently, while farado-muscular contractility became more and more feeble, galvano-muscular contractility rapidly increased, until two cells caused contraction. The following is in brief the explanation offered by Onimus for these differences in the action of the two currents:

The *duration* of a current is the important factor in the production of muscular contractions. The closing of an induced or faradic current is only 0.0114'' in duration, while that of the galvanic is $\frac{1}{20}$ of a second. Hence the faradic more readily excites the healthy nerves and muscles; but, when these are diseased, a longer action is necessary; hence the galvanic is more potent. It is claimed that the faradic current does not *directly* cause contraction of a muscle, but *indirectly* through the intra-muscular nerves; the galvanic current, on the other hand, has a feeble action on intra-muscular nerves; the galvanic current action on idio-muscular contraction. The probability that, in facial paralysis of rheumatismal origin (the cold acting on the periphery), the intra-muscular nerves are attacked from the beginning, accounts for the rapid loss of faradic muscular contractility, while the absence of profound alteration of the muscular fibres, over which the galvanic current has such a ready action accounts for the retention of galvano-muscular contractility.

In the essential paralysis of childhood, the farado-muscular

contractility is generally diminished, and often abolished, while occasionally the galvanic current, as in facial paralysis from cold, produces contractions more readily than in health. If the muscles respond in any marked degree to faradization, it should be used; if not, galvanism is indicated.

The relief of pain, whether of a pseudo-neuralgic or hysterical character, whether dependent on true neuralgia or other causes, is a very important function of electrization; but in no condition has it been more difficult to discriminate correctly in the selection of the proper method of electrical treatment. True neuralgia, as defined by Anstie, is without doubt most successfully treated by galvanism; while hysterical neuralgia, and the so-called pseudo-neuralgia, which are simply forms of pain, occupying certain areas, and running seemingly in the direction of certain nerves, yield most readily to faradism.

More specifically, the effects of *pressure* in the various forms of neuralgia are exceedingly useful, as guiding symptoms, indicating the proper current. I do not by any means lay it down as a universal law, but it will certainly be found that, in the great majority of cases of neuralgia, where firm pressure over the affected nerves aggravates the pain, the galvanic current is indicated, while the faradic current has the greater power to relieve when such pressure does not cause an increase of pain.

In the class of cases called sometimes hysterical hyperæsthesia, it is well known that firm and prolonged pressure affords marked relief, while pressure superficially applied increases the distress. The faradic current is here infinitely superior to the galvanic. In the treatment of the pain of herpes zoster, galvanism is invaluable. In many cases that have fallen under my observation, I have never known it to fail to afford either complete or approximate relief. The effects of galvanism on the extreme suffering that so often accompanies mammary cancer are often little short of magical. I have in many instances seen the acutest agony relieved instantly, and, while this relief is necessarily seldom if ever permanent, it is possible in many cases, by repeated applications, to keep the pain in abeyance for months, and thus the necessity of constantly administering opium is in a measure obviated. For the relief of neither of the last-named diseases have I found faradization to be of essential service.

As we advance to the consideration of those other forms of disease which experience has shown to be more or less amenable to electrical treatment, it will be found to be more difficult, without submitting the patient to preliminary and tentative applications, to discriminate between the currents best adapted to the

case in hand, but I venture to assert that in cases of chorea, of amenorrhœa associated with anæmia and debility, and in cases of nervous exhaustion in general, we cannot often err if we resort to the faradic current by the method of general faradization, either independently or as an adjunct to other treatment.

I beg to be allowed to allude briefly to this subject of general faradization as a constitutional tonic, not only because I believe it to be the central idea of electro-therapeutics, and to have a wider range of usefulness than any other one method of application, but because without such allusion the treatment of my subject would be very incomplete.

It is now nearly ten years since the power of electricity as a tonic was first advanced, and supported by theroretical considerations and clinical illustrations. Because, perhaps, of its novelty alone, this theory excited at first not a little attention both at home and abroad, but was subsequently quite neglected, so far as concerns any adequate allusion to it, by those who have prominently written and lectured. The evidences, however, of carefully elaborated individual experiences have greatly multiplied during the past decade, and furnished abundant proof of the correctness of this theory, but unfortunately very few have undertaken to write upon the subject, and these individual experiences, so rich in results and so important as evidences, are practically lost.

Electricity, more than any other therapeutic means, draws to it the folly, ignorance and cupidity of the land, but all of success that has been achieved by these charlatans has been by some stereotyped applications of this method, ignorantly directed; of the evil that has followed the efforts of these "blind leaders of the blind," no man knoweth. I would, therefore, most earnestly urge those who are especially interested in this department to carefully study the *modus operandi*—the *rationale* and effects of general faradization.

Treatment by Surgical Means of Some Forms of Cancer of the Uterus.—Dr. Lombe Atthill, in his inaugural address as President of the Obstetrical Society of Dublin, says (*Obstet. Journal Great Britain and Ireland, with American Supplement*, February, 1877): In many cases of this disease, perhaps, indeed in the majority of those which come under our observation, little or nothing can be done for the poor patient. Where the disease has already extended to the adjoining tissues, and the uterus has become fixed, it is evident that no advantage can be hoped for from surgical interference. But in other cases where the disease has been detected earlier, an operation offers

by far the best prospect of prolonging, possibly of saving, the patient's life.

The only operation hitherto practiced in this country has been amputation of the cervix uteri, an operation easily enough performed, followed, however, by but very partial success. But at the last meeting of the British Medical Association, held in Sheffield, Dr. Marion Sims, of New York, drew attention to a new and bold operation which he had practised with satisfactory results—namely, the following up of the disease into the uterus, and by a careful dissection, removing from within the cervix, and even from within the body of the uterus itself, every portion of the unhealthy tissue, not alone that which is soft and friable, but also the subjacent structure which is hard and cartilaginous.

I need not occupy your time by pointing out how very different this operation is from that previously practised by us. I was so deeply impressed by the statements made by Dr. Marion Sims, and by the views advocated by him, that I determined to test for myself the value of the operation. The opportunity of doing so unfortunately presented itself only too soon. I have already twice fairly carried out all the details of the operation. I have proved this much, that you may dissect right up into the cavity of the uterus with safety, and that it is possible to remove, apparently at least, every particle of the disease, but it does not follow that even by this bold operation you have saved your patient; many months must elapse before that can be pronounced to be so, and it is but fair to Dr. Sims to add that he only advocates it as being safe in execution, and as holding out the best chance to the patient, if not of cure, at least of prolongation of life.

My patients have been wonderfully benefited, to what extent time alone can prove, but the exhausting hæmorrhage has ceased, the pain is gone, and strength is returning. Nevertheless, I fear, as I have warned their friends, all this may last but for a time. One point in favor of the operation is this, that if carefully executed it is a safer one than that of amputating the cervix, for, with the aid of the duckbill speculum, you can expose the parts and see exactly what you are doing, whereas, when using the *écraseur* for the amputation of the cervix in cases where the vagina is filled up with a cancerous mass, you are obliged to trust altogether to the sense of touch, and even that to but a partial extent, for frequently it is impossible to reach with the finger the healthy tissue. The result may be, as occurred in a case on which I operated myself, that in the effort to remove the whole of the disease-mass, a fold of the vaginal wall became included in the loop of the wire of the *écraseur*, and

the cavity of the peritoneum opened. For myself, I certainly advocate the operation introduced by Dr. Marion Sims.

Iodized Phenol—A New Uterine Escharotic and Alterative, Dr. Robert Battey, of Rome, Georgia, recommends (*Am. Practitioner*, Feb., 1877) iodized phenol as an escharotic and alterative in uterine diseases. It is prepared of two strengths.

RECIPE NO. I.—Take of iodine, one-half ounce; chrystalized carbolic acid, one ounce. Mix, and combine the two by gentle heat.

Several years ago the writer, feeling the need of a combination which should possess not only the properties of a local escharotic, but those of a local, and, at the same time, general alterative also, devised the above formula. The subsequent use of it has proven so satisfactory, and so many and varied forms of its application in uterine disorders have suggested themselves, and especially so favorable has been the report of gynæcological friends to whom the formula has been communicated, and who have largely tested its claims, it seems proper that it should now be put before the profession as a promising addition to our armamentarium.

• When the iodized phenol has been applied to the cancerous uterus, it has attacked the morbid growth with a good degree of energy, destroying the superficial layers very satisfactorily. The applications have not been at all painful when the sound parts have been carefully protected. Hæmorrhage has been arrested very promptly, and during the continuance of the remedy has not returned. The fetor of the discharges has been most markedly diminished, and pain considerably allayed. So variable is the course of uterine cancer, it is difficult to determine the power of any remedy to retard its progress; but there is reason to believe that this method is possessed of some degree of potency in that direction.

The application to the cancerous surfaces is made upon lint or cotton, saturated with the remedy, and surrounded by a cotton tampon to protect the sound parts. A rather free serous discharge from the diseased surfaces usually occurs promptly after the contact of the iodized phenol, and combining with it, would run down upon the healthy tissues if not restrained by a suitable absorbent. The application may be repeated in four to seven days, according to the energy of the proposed treatment. When it is desired to get rid of much fungous growth, the deadened tissue is removed by the curette, and another application made without waiting for the separation of the slough. If it be wished to mitigate the escharotic, it may be diluted with glyce-

rine to any desired degree. In cool weather, it is necessary to warm the preparation to render it liquid for convenient saturation of the dressing. By the sacrifice of a little of its energy, it may be rendered permanently liquid by the addition of a teaspoonful or two of water to the formula.

RECIPE No. II.—Take iodized phenol, one and a half ounce ; crystalized carbolic acid, one ounce ; water, two drachms. Mix and make solution.

This preparation has been very fully tested by the writer in a large number of cases, and in a variety of uterine disorders ; *e. g.*, chronic affections of the cervix, the cervical canal and the endometrium, uterine hypertrophy and sub-involution. It has been used both in its full strength and in various degrees of dilution with glycerine ; sometimes two-thirds of the above strength, sometimes one-half, one-third, and even one-fourth. The strength used has been determined, first, by the mode of application proposed ; second, by the energy of the effect desired ; and third, by the tolerance of the patient.

Mode of Application.—In some cases, it has been used of full strength, and simply painted upon the cervical mucous membrane. In other cases, the whole vaginal cervix has been freely painted over, using a camel-hair pencil. More often, a bit of lint cotton has been securely twisted upon the end of Budd's elastic probe, and, having been saturated with the liquid, carried up to the os internum, once or twice rotated, to bring the liquid well in contact with every part of the cervical canal, and then withdrawn. At other times, the elastic probe has been armed with cotton wound around it to the size of a small uterine tent, or even a large tent, the cotton being secured by thread passed several times around it, and tied with ample ends to hang out at the vulva. The cotton was then saturated with the phenol and passed into the cervical canal, to remain for 12 or 24 hours, the probe having been withdrawn. In other instances, the cotton tent has been made still longer, the internal os dilated, and the saturated tent passed fully up to the fundus, there to remain for a like period of 24 hours. Many times these cotton tents have been allowed to remain until they were thrown off by the uterus, which has usually occurred in 36 to 48 hours. Sometimes the cervical canal has been dilated with sponge, and the interior of the uterus mopped out with the liquid on cotton secured upon the roughened end of the new aluminum probe. The latter instrument has been found to be absolutely safe against danger of leaving the cotton behind in the uterus. In a few instances, a lock of cotton has slipped from the elastic probe while in the uterine cavity, and remained for many days.

It has always been thrown off by the uterus sooner or later, and no harm has resulted.

Of the immediate effects of this treatment, it may be said that the pain inflicted, even by the strongest application, is for the most part, very trifling, and in quite numerous instances, none at all. In this respect, it presents a striking contrast to the nitrate of silver. The carbolic acid, acting as a local anæsthetic, allows us to make powerful applications of the iodine with little or even no pain. In most instances of its energetic application, the patient perceives, in from three to ten minutes, a decided flavor of iodine in the mouth, thus experiencing the evidence of rapid absorption of the drug by the uterus. This is further proven by the observation that a large tent even, well saturated with the black, opaque liquid, is often completely decolorized by the uterine absorption in the short space of 12 hours. In no case has any toxic effect occurred in consequence of the absorption of carbolic acid. That it is freely absorbed, along with the iodine, would seem to be proven by the fact that the odor of the acid is not to be perceived in the tent after withdrawal. The tent does not give rise to the offensive discharge which attends upon the use of sponge, nor is itself offensive upon removal.

Of the more remote results, it may be said, upon the third or fourth day, exfoliated membrane comes away in shreds or sheets, of more or less size, and in thickness corresponding somewhat to the energy of the application which has been made. Sometimes a cast of the cervical canal is seen, white in color, and of thickness so considerable as to remind one of glove-kid. A discharge, more or less bloody, usually continues for one or two, sometimes three, days. The applications are made ordinarily three times in the menstrual period, rarely oftener; sometimes but one or two each month. Under the use of the iodized phenol, excoriations and ulcerations of the os quickly heal, leucorrhœa is arrested, endometritis gradually yields and disappears; the uterine hæmorrhages, which so often attend upon subinvolution, are controlled, and the uterus resumes its normal size and functions.

Whatever may have been the strength of the applications, stricture of the os and cervical canal, too often an unpleasant sequel to the use of nitrate of silver, has not resulted in any case. When applied to the cervix and cervical canal, in a caustic way, the reproduced tissue is normal and not cicatricial in character. It is believed that the very free absorption of iodine by the uterus, in this method of treatment, exerts a decidedly alterative influence over the diseased organ; and more than this, the iodine thus carried into the general circulation is highly ben-

eficial as a constitutional remedy also. It may, therefore, be confidently asserted that iodized phenol should have a place amongst our topical applications to the diseased uterus.

Book Notices, &c.

The Practitioner's Handbook of Treatment ; or, the Principles of Therapeutics. By J. MILNER FOTHERGILL, M. D., member of the Royal College of Physicians of London, etc. Philadelphia: Henry C. Lea, 1877. Pp. 575. (For sale by Messrs. West, Johnston & Co., Richmond.)

This is an excellent book—one long needed. Its practical teachings make it useful to the busy physician ; and the college student will derive from it great assistance in his systematic studies of the intricate subject of therapeutics. The object of the author is “to explain the *rationale* of our therapeutic measures.” No work with which we are acquainted succeeds so admirably. Perhaps a clearer idea of what this book is can be obtained by an extract from the introductory chapter than from anything which our limited space will allow us to say. “The aim of the writer * * * * is to supply a digest of the general principles of therapeutics, to arrange well known facts of practice, together with the explanations furnished by pathological research and physiological inquiry in such array and form that the treatment of each individual case shall become a fairly intelligent and rational procedure, rather than a groping empirical guess.”

But while we thus explain the scope of the work, and commend most unreservedly its design, we should add that this is a *handbook* ; it was not the purpose of the author to treat exhaustively of any of the agents of the pharmacopœias or dispensaries. The author seeks to impress the importance of an intelligent understanding of the *principles* upon which prescriptions should be made, and the *principles* which should guide the practitioner in making his selection to meet given cases. The reader of this book cannot close its pages without being impressed by the importance of a thorough knowledge of the effects of remedies, and the greater importance of a *scientific selection* of agents, rather than of a purely empirical use of the same. He who searches in this work for information regarding the uses of “new remedies” as such will be disappointed—in fact, the author speaks almost wholly of the old remedies. Thus,

of hydrobromic acid, he gives in an appendix only the formula for its preparation, and the dose for its administration. In speaking of rheumatism, no mention is made of salicylic acid or salicin; and in the Appendix, he only quotes a paragraph, giving the results of Dr. Broadbent's experience with salicylic acid. About a third of a page of the Appendix is devoted to jaborandi—some notes contributed by Dr. Dowse, of the Sick Asylum, Highgate. The book is alike non-exhaustive as to the diseases of which it treats. Thus there is no mention of croup.

But it would be doing injustice to the book were we not to add that a long list of diseases is mentioned—the nature of many of them, indeed, being comprehensively discussed, and their symptoms pointed out in the light of cause and effect, while the indications of treatment in each of the diseases spoken of by the author are fully given, with valuable suggestions as to selections of individual remedies.

Since the author in his preface asks for "suggestions how to improve the work in future editions," it seems to us that he might consider the propriety of enlarging the list of diseases and remedies—especially of the so-called "new remedies"—at the expense of an abridgement of the concluding chapter on the "Medical Man at the Bedside"—the main points of which are generally the subjects of either introductory or valedictory lectures in every college course.

A Course of Practical Histology; Being an Introduction to the Use of the Microscope. By EDWARD ALBERT SCHAFER, Assistant Professor of Physiology in University College, London. With Illustrations on Wood. Philadelphia: Henry C. Lee, 1877. 12 mo., pp. xvi—292. (For sale by Messrs. West, Johnston & Co., Richmond.)

The scope of this manual includes a microscopical examination of the blood, the various tissues, and the organs of the human body. The introductory chapter is given up to description of the microscope, general directions for work, etc.; and an appended chapter describes the method of measuring objects under the microscope, mode of drawing microscopic objects, etc. In this Appendix, we find mention of dilute solutions of *eosine*, "an aniline preparation, newly introduced into commerce," for coloring the tissues; it imparts a "rose-red" color. "The process of hardening and staining can be effected simultaneously by the employment of an alcoholic solution of eosine."

The preface informs us that "The purpose of this work is to afford * * * plain and intelligible directions for the

suitable preparation of the animal tissues. * * * The methods recommended have all been tested by experience."

Of the 41 wood cut illustrations, all except one are original.

The work is chiefly of interest to histologists and physiologists and physiological students.

Contributions to Operative Surgery and Surgical Pathology.

By J. M. CARNOCHAN, M. D., formerly Professor of Surgery in the New York Medical College; Surgeon-in-Chief to the State Emigrant's Hospital, 1850-1871, etc. With Illustrations drawn from nature. Parts I. and II. New York: Harper and Brothers, 1877. Royal quarto; pp. 64. Price \$1. (For sale by Messrs. West, Johnston & Co., Richmond.)

The Publishers' announcement of these *Contributions* states that the "work will be published in a series of numbers, to be issued quarterly. Each number, of quarto size, will contain from thirty-two to forty-eight pages of letter-press, printed on the best paper, with illustrations of the cases drawn from nature; and will be complete in the topics it embraces."

We are informed by the author, in his preface, that "This work was commenced some years since, and had reached the fourth number; but was interrupted by destructive fire of the establishment of the printer, thereby losing plates, drawings, lithographs, etc. * * * Some of the matter has been previously published in various medical journals, but has been thought of sufficient importance to be reproduced, as presenting special types of diseases; and the character of the work enables me to add whatever fresh material I have since collected or may collect."

Parts I. and II., now before us, are taken up with An Introductory Address on the Study of Science, delivered while Professor in the New York Medical College which, the author thinks, "may not be out of place as touching on the inductive method of research now so much in vogue by scientists of the present day."

(2). Report of a case of Elephantiasis Arabum of the Right Inferior Extremity, successfully treated by Ligature; with remarks as to the manner of development of the disease, etc. The report of the case here mentioned was first published in the *New York Journal of Medicine*, Sept. 1852, and constitutes the first case on record treated by ligature of the supplying artery. A lithographic plate of this case serves as the frontispiece to Parts I. and II. After the reports of several other cases which were successfully treated by ligature, the author subjoins a

statistical table of 32 cases which were collected by Prof. Wernher, of Giessen, and published in *Deutsche Zeitschrift für Chirurgie* 1875. Of these 32 cases, five were under the care of Dr. Carnochan.

Some interesting and instructive remarks are made "on Ligation of the Trunk of the common femoral artery in relation to secondary hæmorrhage following amputation of the thigh, and in hæmorrhage from wounds of the plantar arteries, and of the posterior and anterior tibial arteries." These "remarks" are supported by reports of several cases which we have not the space to analyze.

We heartily commend to the favor of our readers the design of the publishers to secure to the profession the valuable "Contributions" to science of so eminent and experienced a surgeon as Dr. Carnochan. Part III. will contain "contributions" on amputation of the entire lower jaw; on pregnancy at full period with no vestige of the os-uteri,—vaginal hysterotomy, followed by the use of the forceps, and the safe delivery of a healthy male child; on collapse or shock from external injuries, with the primary treatment; remarks on the time of election for amputation in cases of severe injuries of the extremities occurring from railroad or similar accidents, or from shell or from gun-shot wounds; on Pott's disease; on caries of the spinal column, its pathology and treatment.

We must add that we have nowhere seen finer letter-press work. We must also thank the publishers for selecting pica instead of a smaller type for the body of the work.

The Tonic Treatment of Syphilis. By E. L. KEYES, A. M., M. D., Adjunct Professor of Surgery, and Professor of Dermatology in the Bellevue Hospital Medical College, etc. New York: D. Appleton & Co., 1877. Pp. 88. (For sale by Messrs. Woodhouse & Parham, Richmond.)

The author has made free use in the preparation of this very practical little volume of an article contributed to the *American Journal of Medical Sciences*, January, 1876, and of the facts communicated in his paper read before the recent International Medical Congress.

It is a great pleasure and profit to read this book. The style of composition is plain and enticing; the statements full of practical instruction; and the deductions are logical in their character, and have the confirmation of carefully observed facts. We wish we had the space to make an extended notice of the work and to give extracts from its pages.

The book contains three chapters, on the general treatment, of syphilis, details of general treatment, and the local treatment of syphilis respectively. The first chapter proves that "mercury is generally recognized as capable of overcoming the symptoms of syphilis, and postponing their appearance; and also, that *mercury in minute doses is tonic*." The author shows no less conclusively that "The iodides certainly are tonic and increase the number of red-cells."

The chapters on the details of general and of the local treatment, and of the especial means adapted to special lesions are too ample to attempt even a synopsis of them. We can only say that the work is so exceedingly practical in its character, and treats of a disease so wide-spread that every practitioner would do well to procure a copy.

Second Annual Report of the Board of Health of the State of Georgia, 1876. Atlanta, Ga., 1877. J. G. THOMAS, Savannah, President; V. H. TALIAFERRO, Atlanta, Secretary. Pp. 198—lxxxviii.

We regret that we have not the space to notice this important annual report. The full record given of the epidemic of yellow fever in several of the cities of Georgia—especially Savannah and Brunswick, will make this volume subject to frequent reference by statisticians, &c. In addition to these valuable pages, G. F. Cooper, Sanitary Commissioner for 3rd District, communicates a report on *Food, etc.* Dr. Ely McClellan, Surgeon U. S. Army, gives a capital paper on the Relations of Health Boards and other Sanitary Organizations, with Civic Authorities. He calculates the money loss to Savannah by the yellow fever epidemic to have been \$5,862,357. Dr. B. H. Bigham argues briefly but earnestly for the erection of another insane asylum or hospital in Georgia where there is now but one such institution.

We confess to some surprise in seeing the degree of active interest taken by members of the Board in the objects of its organization. In view of the fact that the Board has neither legal powers nor means to discharge the duties assigned to them, they deserve great credit for the efficient services they have rendered. It is to be hoped that the Legislature of Georgia will at once consult the interest of the people, and protect them against further epidemics by arming the State Board with sufficient means and authority.

Editorial.

THE ARKANSAS STATE MEDICAL ASSOCIATION.

We feel a deep sympathy with this Association in its excommunication from the American Medical Association; and believing that it has been wrongly treated, we lend it cheerfully such influence as our columns possess to vindicate its claims to recognition. So long as the American Association devotes its time to the advancement of the interests of scientific medicine, and the promotion of true professional ends, it will find in us its warmest advocate. But, when it so far lowers its dignity as to enter into sectional quarrels, and to exclude from representation in its scientific deliberations men of note, whose attainments are worthy of record, and whose professional character is unexceptionable, we shall not hesitate, on the one hand, to point out the flaws in its plan of organization, and, on the other, to represent the claims of the oppressed.

In the ostracism of the Arkansas State Medical Association, at the last session of the American Medical Association, we find as remarkable legislation as was ever enacted. This State Association had for seven or eight years been regularly sending delegates to the National Association, and had been annually admitted to recognition. Suddenly, however, there sprung up a controversy of purely State interest, which resulted in the organization of a new State Society, which seems to have been composed of a small minority of the older organization, with the addition of a large number who had never connected themselves with any former State Society. Thus, there exists in Arkansas two Societies, one known as the Arkansas State Medical Association, which is the parent of the other known as the State of Arkansas Medical Society. Delegates were sent from each of these bodies to the last session of the American Medical Association; but the delegates from the parent Society were denied admission, while those of the junior Society were admitted.

What charge was there against the older Society to deny it representation? The Minutes of the Judicial Council do not mention any, as they should, in a matter of such vital interest to a national profession. But, from the best information at our

command, there was certainly not *sufficient* evidence to justify such a procedure on the part of the Judicial Council, which, according to the terms of the law, "shall be final."

There has undoubtedly been a too hasty judgment in this matter, as it appears in the light of the available evidence. We find it stated in the preamble to the Plan of Organization of the American Medical Association, that it has for its objects, among others, "promoting the usefulness, honor and interests of the medical profession, * * * * for exciting and encouraging emulation and concert of action in the profession, *and for facilitating and fostering friendly intercourse between those who are engaged in it.*" (Italics ours.) We content ourselves with the simple question, Does the action of the National Association in denying representation of the parent Arkansas Society facilitate and foster friendly intercourse between practitioners in that State? If not, then the Judicial Council itself, acting for the Association, has acted extremely *injudiciously* in going beyond the law in the case.

But there is an inconsistency in the action of the Judicial Council which cannot be overlooked. The action of the Council in denying representation to the Arkansas State Medical Association, amounts virtually to an expulsion of that Association. The proofs of this are too evident to require iteration. If, then, the Association is expelled, its members certainly stand in the relation of expelled members. The sixth paragraph of Article II of the Plan of Organization of the National Association provides that "No one expelled from this Association shall at any time thereafter be received as a *delegate or member* unless by a three-fourths vote of the members present at the meeting to which he is sent or at which he is proposed." Now, it so happens that among the listed members or delegates attending the last session of the American Medical Association, are the names of several who are members of the State Society which has virtually been expelled, although these parties appear as delegates from local Societies, which, as such, are not "recognized by representation" in the *new* State Society.

But it may be maintained that each State is entitled to representation from only one State medical organization. After a careful examination of all the laws of the National body bear-

ing upon the subject, we fail to discover any law which prohibits representation from two State Societies in the same State. It is true, the organization of two State Societies in the same Commonwealth may not have been anticipated by the framers of the original laws on the subject; but what possible objection can there be to two Societies in the same State, if the true object of the National Association be, as is stated in the preamble to the resolution adopted by the Convention of 1847, "for cultivating and advancing medical knowledge?"

But we do not propose to pursue the subject further just now. Our purpose has been simply to call attention to the matter which we are assured by a circular recently received, will be again brought to the attention of the American Association at its meeting in Chicago. We have not entered into a discussion of the cause of the contention between the two Societies, since that is of a local character. In the recognition of both Societies, there is more hope of an amicable adjustment of the differences between the two, and for the promotion of scientific interests in the State of Arkansas.

The Commencement of the Medical College of Virginia, on the night of February 28th, was a brilliant occasion. The audience of over 2,000, representing mostly the best society of this community, crowded the theatre. After prayer by Rev. Dr. Curry, of the Baptist Church, the Dean, Dr. Jas. B. McCaw, presented diplomas of graduation as Doctors of Medicine to the following gentlemen: W. O. Baskerville, Va.; T. R. Carothers, S. C.; H. L. Cowan, Va.; T. R. Evans, Va.; J. J. A. Mencure, Va.; W. W. Maclin, Va.; W. P. Nicolson, Va.; T. H. Pleasants, Va.; R. T. Styll, Va.; M. McJ. Tatom, N. C.; J. R. Wheat, Va.

Prof. Wm. H. Taylor, M. D., on the part of the Faculty, next conferred the degree of Graduate in Pharmacy upon J. A. Augustine, A. C. Jones, J. E. Morris, J. V. Ramos and C. J. Winfree—all of Virginia.

The Faculty prize of a pocket case of instruments for the best essay on *Diphtheria*, was awarded to Dr. W. O. Baskerville, of Mecklenburg Co., Va. Mr. A. R. B. Hartsook, of Richmond, Va., received the prize of the Professor of Surgery, Dr. Hunter McGuire, for *Notes on Inflammation*.

Major John W. Daniel, Senator in the Virginia Legislature from Lynchburg, was introduced, amid great applause, as the

orator of the occasion, and for over an hour he enchained the attention of the vast audience while he drew some comparisons and parallels between the lawyer and the doctor.

The College is, year by year, advancing the standard of graduation; and a trusty evidence of the thoroughness of instruction rests in the fact that those graduates of the last few years who have sought position in the Army and Navy have, with singular rare exception, passed their examinations satisfactorily, and been assigned to duty.

The Spring and Summer course of Lectures commenced on the 13th of March. We earnestly commend its advantages to all medical students. Even if medicine were taught with only an average degree of thoroughness and skill, the devotion of the additional length of time to study—nearly four months—would secure the most valuable results. But when the high order of teaching in this course is considered, both in the Lecture-room and at the bed-side, we think we do not express ourselves too strongly when we say that the student who absents himself from its benefits, except from inexorable necessity, perpetrates a serious injury on his present and future interests. We say this the more frankly since we are now in no manner connected with the College.

Corrigenda.—We regret exceedingly to find the excellent, practical article on *Digestion and its Disorders*, by Dr. Wm. W. Murray, of Baltimore, published in our last number, marred by so many typographical errors as a private letter from him points out. The paper was printed while the editor was confined to his bed by sickness, and hence could not revise the proof-sheets. Those who may bind their volumes will please make the following corrections:—On page 767, line 5 from top, for “successful,” read *unsuccessful*; same page, 2nd line from bottom, for “the purposes,” read *two purposes*; page 768, line 17 from top, for “digestion,” read *deglutition*; same page, 2nd line from bottom, for “water, both,” read *water-bath*; page 769, line 8 from bottom, for “albumen,” read *albuminose*; page 770, line 4 from bottom, for “exists in,” read *exerts no*; page 773, line 20 from top, for “inervation,” read *innervation*; page 776, line 10 from top, for “arrested,” read *avoided*; page 777, line 14 from bottom, for “to arrest,” read *to meet*; page 778, last line, for “Dr. Leard,” read *Dr. Leared*; page 779, line 5 from top, for “cause,” read *cure*.

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EXPLANATIONS.—The letters, V. T., preceding some of the figures, refer to the paging of the volume of **Transactions of the Medical Society of Virginia, 1876**, which was issued with the January number, 1877, of the MONTHLY, but which, in the completed third volume of the journal, should be bound immediately after the journal matter proper.

Notices of *books, journals and obituary notices* are respectively recorded under the headings of **Book Notices, Journalistic and Obituary Record.**

A printer's error omits paging 695-702, inclusive. To prevent confusion by repetition of figures, the paging has been allowed to run regularly on from page 703.

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Yellow jessamine. See <i>Gelseminum</i> .		Zinc, phosphide, Therapeutic action of
		876

ADDENDA.—Under head of **Book Notices**, the following should have been inserted :

Georgia Board of Health, Second Annual Report of.....	892
Histology, Course of Practical (Schafer).....	889
Practitioner's Hand-book of Treatment, or Principles of Therapeutics (Fothergill).....	888
Surgery and Surgical Pathology, Contributions to Operative (Carnochan).....	890
Syphilis, Tonic Treatment of (Keyes).....	891









